

GenCore version 5.1.6
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OM protein - protein search, using sw model
Run on: December 4, 2003, 19:20:30 ; Search time 35 Seconds
(without alignments)
3092.643 Million cell updates/sec

Title: US-09-294-539-4
Perfect score: 2952
Sequence: 1 MEPTSHVTAFSDSDASV.....RSLGSSSSSTSGAIRPRR 582

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 684280 seqs, 185983659 residues

Total number of hits satisfying chosen parameters: 684280

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:
1: /cgn2_6/ptodata/2/pubaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/2/pubaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/2/pubaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/2/pubaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/2/pubaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/2/pubaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/2/pubaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/2/pubaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/2/pubaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/2/pubaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/2/pubaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/2/pubaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/2/pubaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/2/pubaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/2/pubaa/US10_NEW_PUB.pep.*
17: /cgn2_6/ptodata/2/pubaa/US60_NEW_PUB.pep.*
18: /cgn2_6/ptodata/2/pubaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2934	99.4	582	12	US-09-848-841-10
2	1737	58.8	576	12	US-10-328-675A-4
3	1672.5	56.7	588	8	US-09-908-884-14
4	1672.5	56.7	588	9	US-09-908-323-14
5	1672.5	56.7	588	12	US-10-328-675A-2
6	1629	55.2	604	12	US-10-328-675A-64
7	1276	43.2	593	8	US-08-908-884-3
8	1276	43.2	593	9	US-09-908-323-3
9	1276	43.2	593	11	US-09-934-455-74
10	1276	43.2	593	12	US-09-848-841-17
11	1276	43.2	593	14	US-10-225-068-242
12	1276	43.2	593	14	US-10-079-035-3
13	1223.5	41.4	579	12	US-10-328-675A-6
14	1213.5	41.1	600	12	US-10-328-675A-20
15	1213.5	41.1	601	11	US-09-934-455-434

16	1213.5	41.1	601	12	US-10-328-675A-72
17	1117.5	37.9	635	12	US-09-848-841-16
18	1060.5	35.9	591	12	US-10-328-675A-66
19	1045.5	35.4	592	14	US-10-047-593-2
20	1045.5	35.4	592	14	US-10-047-593-4
21	1045.5	35.4	609	15	US-10-318-780-11
22	1045.5	35.4	607	15	US-10-318-780-10
23	1031	34.9	586	12	US-10-328-675A-8
24	1009	34.2	574	12	US-10-328-675A-70
25	995	33.7	475	15	US-10-318-780-4
26	987	33.4	455	12	US-09-848-841-12
27	971.5	32.9	601	15	US-10-328-675A-18
28	844.5	28.6	409	15	US-10-318-780-21
29	839.5	28.4	533	11	US-09-934-455-402
30	825	27.9	217	12	US-10-328-675A-46
31	823	27.9	219	12	US-10-328-675A-30
32	801.5	27.2	467	11	US-09-934-455-28
33	801.5	27.2	467	12	US-10-225-068-170
34	782.5	26.5	381	15	US-10-318-780-17
35	739	25.0	325	12	US-09-848-841-8
36	678	23.0	369	12	US-10-328-675A-74
37	644	21.8	165	12	US-10-328-675A-38
38	614	20.8	165	12	US-10-328-675A-40
39	599	20.3	165	12	US-10-328-675A-42
40	597	20.2	235	15	US-10-219-220-290
41	502.5	17.0	180	15	US-10-318-780-35
42	493	16.7	165	12	US-10-328-675A-58
43	485	16.4	165	12	US-10-328-675A-32
44	477	16.2	165	12	US-10-328-675A-34
45	470	15.9	165	12	US-10-328-675A-48

ALIGNMENTS

RESULT 1

US-09-848-841-10
; Sequence 10, Application US/09848841
; Publication No. US20030172411A1
; GENERAL INFORMATION:
; APPLICANT: E. I. du Pont de Nemours and Company
; APPLICANT: Butler, Karla
; APPLICANT: Falco, Carl
; APPLICANT: Famodu, Omolayo O.
; APPLICANT: Fang, Yiwen
; APPLICANT: Han, Feng
; APPLICANT: Heppard, Elmer
; APPLICANT: Liu, Zhan-Bin
; APPLICANT: Miao, Gou-Hau
; APPLICANT: Odeil, Joan
; APPLICANT: Rafalski, Antoni
; TITLE OF INVENTION: Disease Resistance Factors
; FILE REFERENCE: B1252 US NA1
; CURRENT APPLICATION NUMBER: US/09/848,841
; CURRENT FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: 60/107,242
; PRIOR FILING DATE: 1998-11-05
; PRIOR APPLICATION NUMBER: US99/25,953
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 10
; LENGTH: 582
; TYPE: PRT
; ORGANISM: Oryza sativa
US-09-848-841-10

Query Match 99.4%; Score 2934; DB 12; Length 582;
Best Local Similarity 99.5%; Pred. No. 7.9e-262;
Matches 579; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 MEPTSHVTAFSDSDASVEGDADADADVEALRRLLSDNLAAAFRSPDFAFIADARIA 60

Db 1 MPPPTSHVNTAFSDSDSASVEEGADADAEALRLSDNLAAAFRSPEDFAFLADARIA 60
Qy 61 VPGGGGGDLRVHRCVLSARSFRLGVFARRAAAAAGGGGDCSRLELRELLGGGGBE 120
Db 61 VPGGGGGDLRVHRCVLSARSFRLGVFARRAAAAAGGGGDCSRLELRELLGGGGBE 120
Qy 121 VEYGEALRLVLDLYLSGRVGDLPKAAACLCVDEDCAHVGHCPAVAFMAQVLPAASTFOVA 180
Db 121 VEYGEALRLVLDLYLSGRVGDLPKAAACLCVDEDCAHVGHCPAVAFMAQVLPAASTFOVA 180
Qy 181 ELTNLFQRRLLDVLDKVEVDNLLILSVANLCKNSCKMLERCLDMVVRNLDMLTLEKS 240
Db 181 ELTNLFQRRLLDVLDKVEVDNLLILSVANLCKNSCKMLERCLDMVVRNLDMLTLEKS 240
Qy 241 LPPDVTKQIIDARLSGLISPENKGFPHVRIHRAALSDDDVELVRLMLTTEGQTNLDDA 300
Db 241 LPPDVTKQIIDARLSGLISPENKGFPHVRIHRAALSDDDVELVRLMLTTEGQTNLDDA 300
Qy 301 FALHYAVEHCDSKITTELDDALADVNHNPRGYTVLHIAARRRPPKIIIVSLLTGARP 360
Db 301 FALHYAVEHCDSKITTELDDALADVNHNPRGYTVLHIAARRRPPKIIIVSLLTGARP 360
Qy 361 DVTFDGRKAVQISKRLTKQDYGTVTEEGKSPKORLCIEILEQAERDPQLGEASVSLA 420
Db 361 DVTFDGRKAVQISKRLTKQDYGTVTEEGKSPKORLCIEILEQAERDPQLGEASVSLA 420
Qy 421 MAGESLRGRLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPERQRTTV 480
Db 421 MAGESLRGRLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPERQRTTV 480
Qy 481 DLNESPFFIMKEHLARMTALSKTVELGKFFPRCSNVLDKIMDDTDPVSLGRDTSABKR 540
Db 481 DLNESPFFIMKEHLARMTALSKTVELGKFFPRCSNVLDKIMDDTDPVSLGRDTSABKR 540
Qy 541 KRFHDLQVLOKAFHEDKEENDRSGLSSSSSSTSGAIRPRR 582
Db 541 KRFHDLQVLOKAFHEDKEENDRSGLSSSSSSTSGAIRPRR 582

RESULT 2

US-10-328-675A-4
; Sequence 4, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Weier, John
; APPLICANT: Weier, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDI
; CURRENT APPLICATION NUMBER: US/10/328,675A
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2000-03-06
; PRIOR FILING DATE: 2000-03-06
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 4
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Lycopersicon esculentum
US-10-328-675A-4

Query Match 58.8%; Score 1737; DB 12; Length 576;
Best Local Similarity 59.9%; Pred No. 2.3e-15;
Matches 349; Conservative 94; Mismatches 108; Indels 32; Gaps 8;
Qy 11 AFSODSDSAS-----VEEGADADAEALRLSDNLAAAF-RSPEDFAFLADARIAVP 62
Db 6 AFSODSDISGSSSICCMNESETSL-ADVNSLKLSETLISIFDASAPDFDFAKLAP 64
Qy 63 GGGGGGDLRVHRCVLSARSFRLGVFARRAAAAAGGGGDCSRLELRELLGGGGBE 122

Db 65 ----GGKEIPVHRCILSARSFFKVMFC-----GKDSSTKLEKELM----KEYE 106
Qy 123 VGEALRLVLDLYLSGRVGDLPKAAACLCVDEDCAHVGHCPAVAFMAQVLPAASTFOVAEL 182
Db 107 VSFDVAVSVLAYLSYSGKVRPASQKVCVCDNECLHVACRPVAFVFWQVLYASFQISQL 166
Qy 183 TNLQRRLLDVLDKVEVDNLLILSVANLCKNSCKMLERCLDMVVRNLDMLTLEKS 242
Db 167 VDKFQRRLLDVLDKVAVDDVMVLSVANICGKACERLLSRICDIIVKSNVDIITLDSLP 226
Qy 243 PDVTKQIIDARLSGLISPENKGFPHVRIHRAALSDDDVELVRLMLTTEGQTNLDDAFA 302
Db 227 HDIVKQITDSAEGLQGPESNGFPDKVKKIHRALSDDDVELVRLMLKEGHTTLDAYA 286
Qy 303 LHYAVEHCDSKITTELDDALADVNHNPRGYTVLHIAARRRPPKIIIVSLLTGARPADV 362
Db 287 LHYAVAYCDAKTAEILLDLSLADVNHNQNPGRGHTVLHVAAMRKEPKIIVSLLTGARP 346
Qy 363 TFDGRKAVQISKRLTKQDYGTVTEEGKSPKORLCIEILEQAERDPQLGEASVSLA 422
Db 347 TSDGKKAQIAKRLTRVLVDFTKSTEKGSAKPKORLCIEILEQAERDPQLGEASVSLA 406
Qy 423 GESLRGRLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPERQRTTV 482
Db 407 GDDLRLKLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPERQRTTV 466
Qy 483 NESPFIMKEHLARMTALSKTVELGKFFPRCSNVLDKIM--DDETDPVSLGRDTSAB-- 538
Db 467 NEAPFKKEHLARMTALSKTVELGKFFPRCSNVLDKIM--DDETDPVSLGRDTSAB-- 526
Qy 539 -KRKRFHDLQVLOKAFHEDKEENDRSGLSSSSSSTSGAIRP 580
Db 527 LKQRYMELQVLOKAFHEDKEENDRSGLSSSSSSTSGAIRP 569

RESULT 3

US-08-908-884-14
; Sequence 14, Application US/08908884
; Publication No. US20020138872A1
; GENERAL INFORMATION:
; APPLICANT: Dong et al.
; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/908,884
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045


```

RESULT 5
US-10-328-675A-2
; Sequence 2, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDIV1
; CURRENT APPLICATION NUMBER: US/10/328,675A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 588
; TYPE: PRT
; ORGANISM: Nicotiana tabacum
US-10-328-675A-2

Query Match          56.7%; Score 1672.5; DB 12; Length 588;
Best Local Similarity 56.8%; Pred. No.2:2e-145;
Matches 336; Conservative 102; Mismatches 119; Indels 35; Gaps

QY 11 AFSDSDSASVEE-----GDADADAVEALRLRLSDNLAAP-RSPEDFAFLAD 56
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 57 ARIAVPGGGGGGDLVRHRCVLSARSPPLRGVFAPRAAAAAGGGGDSERLELRELLGG 116
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 67 AKLVV---SGPCKEIPVHRCLISARSPPFFKNLFC-----GKKEKNSKVELKEVM-- 113
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 117 GGEVEVGEALRLVLDLYLSGRVCDLPKAACLVDEDCAHVGCCHPAVAFMAQVLFAAST 176
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 114 --KEHVSVDVMSVLAFLYLSGKVRPSPKGVCCVNDNCDSHVACRPAVAFLEVLVYST 171
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 177 FQVABLTNLFQRLDLVDLKDVEVDNLILLISVANLCNCKSMKLLERCLDMVVRSLDMIT 236
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 172 FQISELVKDFQRLHLLDLKTAADDVMMVLSVANI CGKACERLLSSCIEIIVKSNVDIT 231
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 237 LEKSLPPDVQIKQIDARLSGLGISPENKGPKNKHVRIHRALDSDDVVLVRLMLTEGQTN 296
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 232 LDKALPHDIVQKQITDSRAELGLOGPESGPPDKHVRIHRALDSDDVLELQMLREGHTT 291
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 297 LDDAFALHVAVEHCDSKITTELLDALADVNRHNRPGYTVLHTAARRRREPKEIIVSLITKG 356
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 292 LDDAYALHVAAYCDAKTTAEILLDALADINHQNSRGYTVLHVAAKREPKEIIVSLITKG 351
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 357 ARPADVTDGKAKVOISKRLTKQGDIYGVGTGKSPKRLCTEILEQAERDDPOLGEAS 416
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 352 ARPSDLTSDGRKALQIAKRLTRLVDFSKSPGEGKSASNDRLCTEILEQAERDDPDLGEAS 411
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 417 VSLMAGSLSRGLLYLENRVALARIMFPMEARVAMDIAQVDCGTLFENLGSANPPPERQ 476
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 412 VSLWAGDDLRMLKLYLENRVGLAKILFPMEAKVAMDIAQVDCGTSFFPLASTGKXWANAQ 471
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 477 RTTVDLNESPFMTKEEHLARMTALSKTVELGKGFPPRCNSNVLDKIM--DDEDTVSLGRD 534
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 472 RTTVDLNEAPFKIEEHLNRLRALSRIVELGKFFPRCSVLNKIMDADDLSEIAYMGND 531
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 535 TSAE---KRKPHDLQDVQKAFHEDKEENDR-SGLSSSSSSSTSGIAIPRR 582
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 532 TAEERQLKKQYMEIQEILITKAFTEDEEYDKTNITSSSCSSSTSGKVDXPK 583
Db      : : : : : : : : : : : : : : : : : : : : : : : : : : : :

```

RESULT 6
US-10-328-675A-64
; Sequence 64, Application US/10328675A

; Publication No. US20030159171A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Salmeron, John
 ; APPLICANT: Weisslo, Laura
 ; APPLICANT: Willits, Michael
 ; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
 ; FILE REFERENCE: 308570USNPDI
 ; CURRENT APPLICATION NUMBER: US/10/328,675A
 ; CURRENT FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: 09/519,232
 ; PRIOR FILING DATE: 2000-03-06
 ; PRIOR APPLICATION NUMBER: 60/219,338
 ; PRIOR FILING DATE: 1999-03-09
 ; NUMBER OF SEQ ID NOS: 74
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 64
 ; LENGTH: 604
 ; TYPE: PRT
 ; ORGANISM: Beta vulgaris
 US-10-328-675A-64

	Query Match	55.2%	Score 1629;	DB 12;	Length 604;
	Best Local Similarity	57.4%	Pred. No. 2.3e-141;		
	Matches 343;	Conservative 81;	Mismatches 130;	Indels 44;	Gaps 103
Qy	11	AFSDSDSAS-----	-----VEEGDADADAVEALRLRLDNLAAAFR---	SPED 50	
Db	15	AFSDSDNSINGSSICCVAAATTTTAAENSLSTPDAAALLRLSENLDLSLQFSLSLSD 74			
Qy	51	FAFLADARIAVPGGGGGGDLRVHRCVLSARSFPLRGVFAFRAAAAAGGGGEGDSER---	107		
Db	75	SDSFADAKIVV---SGDSREVAHRCVLSRSSGFFRSFAFAKREKEK----	ERDKERVVK 127		
Qy	108	LELREILGGGGEVEGVGEALRLVLDVLYGSRVCDLPKAACLCVDECAHVGCCHPAVAFM 167			
Db	128	LELKDLAG-----DFEVGFDVSAVGLYSGKVRNLPRGICVCVDEDCSHEACRPADV 183			
Qy	168	AQVLFAASTFQVAELTNLFORLLDVLVDKVEVDNLLILSLSVANLCNKSCKMLERCLDMV 227			
Db	184	VEVLYLSHKEFIEVELYSYQRLHLLDLDKAPDDVLVLSVAEMCGNACDGLLARCIDKI 243			
Qy	228	VRSNLDMITLESKLPDPVVIKQIIDARLSGLISPENKGFNKHVRRIHRAALDSDDELVR 287			
Db	244	VRSDIDVTITDKSLPQNVVQIITDKELGFTSPGRVEFPDKHKVRIHRALESDDVELVR 303			
Qy	288	MLLTEGQTNLDDAFALHYAVEHCDSKITTELLDLATADVNRHNRPGYTVLHIAARREPK 347			
Db	304	MLLKERHTTLDAYALHYAHAOCDAKTTTELLEGLADVNLRLNRHTVHLVHAAMRKEPK 363			
Qy	348	IIVSLTLTKGARPADVFDGRKAVQISKRLLTKQGDYFGVTBEGKPSPKDRLCIEILEQAE 407			
Db	364	IIVSLTLTKGAHPSDITSDDKALQIAKELTKAVDFYKTTTEGQKADPKDRLCIEILEQAE 423			
Qy	408	RDPLQGEASVSLWAMAGESRGRLLYLENRVALARIMPPMEARVAMDIAQVDGTLEFNIGS 467			
Db	424	REPLLGEGSVSLAKAGDDLRLMKLLYLENRVALARLLFPMEAKVAMDIAQVDGTSEFTLSK 483			
Qy	468	GANPPPERQTTVDLINESPIMKEEHLARMTALSKTVELKRRFPFRCSNVLDKTMD--DE 525			
Db	484	NI---ADARNNAVDLNEAPPILKEEHLQRMKALSKTVELKRRFPFRCSNVLNKTMDAEDL 540			
Qy	526	TDPVSLGRDTSAB--KRRKRFHDLQVLOKAFHEDKEENDRSLGSSSSSSSTSIGAIRP 580			
Db	541	SQAFLGKGTPEQRQRKRYLEQLDALTAKFTEDKEEFDRSTLSSSSSSSTPMG--RP 596			

RESULT 7
 US-08-908-884-3
 ; Sequence 3, Application US/08908884
 ; Publication No. US20020138872A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dong et al.
 ; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF

```

;
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/908,884
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 593 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-908-884-3

Query Match 43.2%; Score 1276; DB 8; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

Qy 5 TSHVTNAPSDSDSASVEEGDADADAEALRLSDNLAAPRSPDFADARLAVPGG 64
Db 17 TSFVATDNTDSSIVYLAABQVLTGPDVSAQLLSNSFESVDFSPD--FYSDAKLVL--- 71
Qy 65 GGGGDLVRHRCVLSARSPFURGVFARRAAAAGGGGDSERLELRLGGGSEVVG 124
Db 72 -SDGREVSFHRCLVSARSFFKSALA--AAKKEKDSNNNTAAVKLEKEI---AKDYEVG 124
Qy 125 YEALRLVLDYLSGRVGDLPKAACLCVDEDCAHVGHCHPAVAFMAQVLFPAASTFQVAELTN 184
Db 125 FDSVVTVLAYVYSSVRPPPKGVSCADENCCHVACRPADVPMLEVLYLAFIKFIPELIT 184
Qy 185 LQRLDLVDKVEDVNDLLILSVANLCKNSCKMLERCLDMVVRNSLDMITLKSLEPD 244
Db 185 LYQRHLDDVQVIEDTLVLILKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLEPE 244
Qy 245 VIKQIIDARLSLGLSPENKGNPKVRRRIHRLSDSDVLRMLLTGQTNLDDAFALH 304
Db 245 LVKEIIDRRKELGLVPRVKV----KHVSNVHKALSDSDIELVKLLKEDHTNLDACALH 300
Qy 305 YAVEHCDSKITTEILDALADVNNHNPGRYTVLHIAARRRKPPIVSLITKCARPDVTF 364
Db 301 FAVAYCNKVTATDLLKLDLADVNNHNPGRYTVLHVAAMRKEPQLTSLLEKASASEATL 360
Qy 365 DGRKAVQISKRITKQDVGVTGEEKPSPKDRLCITELIQARRRDPQLGEASVSLAMAGE 424
Db 361 EGRALTAKQMTAVECNIPQCKHSLKGRCLVCLEILEQEDRQIQIPDVPSPFAVAAD 420
Qy 425 SLRGRLLYLENRLARINFPMEARVAMDIAQVDGTLFNLGSGANPPPER-----QRTTV 480

;
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/908,323
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 593 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-908-884-3

Query Match 43.2%; Score 1276; DB 9; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

Qy 5 TSHVTNAPSDSDSASVEEGDADADAEALRLSDNLAAPRSPDFADARLAVPGG 64
Db 17 TSFVATDNTDSSIVYLAABQVLTGPDVSAQLLSNSFESVDFSPD--FYSDAKLVL--- 71
Qy 65 GGGGDLVRHRCVLSARSPFURGVFARRAAAAGGGGDSERLELRLGGGSEVVG 124
Db 72 -SDGREVSFHRCLVSARSFFKSALA--AAKKEKDSNNNTAAVKLEKEI---AKDYEVG 124
Qy 125 YEALRLVLDYLSGRVGDLPKAACLCVDEDCAHVGHCHPAVAFMAQVLFPAASTFQVAELTN 184
Db 125 FDSVVTVLAYVYSSVRPPPKGVSCADENCCHVACRPADVPMLEVLYLAFIKFIPELIT 184
Qy 185 LQRLDLVDKVEDVNDLLILSVANLCKNSCKMLERCLDMVVRNSLDMITLKSLEPD 244
Db 185 LYQRHLDDVQVIEDTLVLILKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLEPE 244
Qy 245 VIKQIIDARLSLGLSPENKGNPKVRRRIHRLSDSDVLRMLLTGQTNLDDAFALH 304
Db 245 LVKEIIDRRKELGLVPRVKV----KHVSNVHKALSDSDIELVKLLKEDHTNLDACALH 300
Qy 305 YAVEHCDSKITTEILDALADVNNHNPGRYTVLHIAARRRKPPIVSLITKCARPDVTF 364
Db 301 FAVAYCNKVTATDLLKLDLADVNNHNPGRYTVLHVAAMRKEPQLTSLLEKASASEATL 360
Qy 365 DGRKAVQISKRITKQDVGVTGEEKPSPKDRLCITELIQARRRDPQLGEASVSLAMAGE 424
Db 361 EGRALTAKQMTAVECNIPQCKHSLKGRCLVCLEILEQEDRQIQIPDVPSPFAVAAD 420
Qy 425 SLRGRLLYLENRLARINFPMEARVAMDIAQVDGTLFNLGSGANPPPER-----QRTTV 480

;
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/908,323
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 593 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-908-323-3

Query Match 43.2%; Score 1276; DB 9; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

Qy 5 TSHVTNAPSDSDSASVEEGDADADAEALRLSDNLAAPRSPDFADARLAVPGG 64
Db 17 TSFVATDNTDSSIVYLAABQVLTGPDVSAQLLSNSFESVDFSPD--FYSDAKLVL--- 71
Qy 65 GGGGDLVRHRCVLSARSPFURGVFARRAAAAGGGGDSERLELRLGGGSEVVG 124
Db 72 -SDGREVSFHRCLVSARSFFKSALA--AAKKEKDSNNNTAAVKLEKEI---AKDYEVG 124
Qy 125 YEALRLVLDYLSGRVGDLPKAACLCVDEDCAHVGHCHPAVAFMAQVLFPAASTFQVAELTN 184
Db 125 FDSVVTVLAYVYSSVRPPPKGVSCADENCCHVACRPADVPMLEVLYLAFIKFIPELIT 184
Qy 185 LQRLDLVDKVEDVNDLLILSVANLCKNSCKMLERCLDMVVRNSLDMITLKSLEPD 244
Db 185 LYQRHLDDVQVIEDTLVLILKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLEPE 244
Qy 245 VIKQIIDARLSLGLSPENKGNPKVRRRIHRLSDSDVLRMLLTGQTNLDDAFALH 304
Db 245 LVKEIIDRRKELGLVPRVKV----KHVSNVHKALSDSDIELVKLLKEDHTNLDACALH 300
Qy 305 YAVEHCDSKITTEILDALADVNNHNPGRYTVLHIAARRRKPPIVSLITKCARPDVTF 364
Db 301 FAVAYCNKVTATDLLKLDLADVNNHNPGRYTVLHVAAMRKEPQLTSLLEKASASEATL 360
Qy 365 DGRKAVQISKRITKQDVGVTGEEKPSPKDRLCITELIQARRRDPQLGEASVSLAMAGE 424
Db 361 EGRALTAKQMTAVECNIPQCKHSLKGRCLVCLEILEQEDRQIQIPDVPSPFAVAAD 420
Qy 425 SLRGRLLYLENRLARINFPMEARVAMDIAQVDGTLFNLGSGANPPPER-----QRTTV 480
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Db 125 FDSVTVLAVYSSVRPPKGVSECADENCCVACRPADVDFWLVYLAIFKIPELIT 184
Qy 185 LFORLLDVLKVEVDNLLILSVANLCKNCKMLERCLDMVVRNSLDMITLKSLLPPD 244
Db 185 LYQRHLLDVVDKVIETDVLILKLANICGKACMKLLDRCKEIIIVKSNVDMVLSKSLPEE 244
Qy 245 VIKQIIDARLSGLISPENKGFPHKVRIRHRLDSDDDVELVRLMLLTEGQTNLDADFALH 304
Db 245 LVKEIIDRRKEGLEVPKVK---KHVSNVHKAALSDDDIELVKLLKEDHTNLDACALH 300
Qy 305 YAVEHCDSKITTELLDALADVNHRNPRGYTVLHIAARRREPKEIIVSLITKGPADVTF 364
Db 301 FAVACNVKTATDLKLDADVNHRNPRGYTVLHVAARKKEPOLILSLLEKGSASEATL 360
Qy 365 DGRKAVQISKRTKQGDYFVTEGKPSKORLCIELEQAERPPQGEASVSLAMAGE 424
Db 361 EGRITMIAKQATMAVECNIPQCKHSLKGRLCVEILEQEDKREQIPRDVPPPSFAVAAD 420
Qy 425 SLRGRLLYLENRVALARIMFMEARVAMDIQVDTGLTFENLGSANPPPER---QRTTV 480
Db 421 ELKMTLLDLENVALAQRFPTEAQAAMEIAEMKGTCEFIVTS---LEPDRLTGKTSP 477
Qy 481 DLNESPFIMKEEHLARMTALSKTVELGKRPFCNSVLDKIMD-DETDVPSLGRDTSAEK 539
Db 478 GVKIAPFRILEHQSRLKALSKTVELGKRPFCNSAVLDQIMNCELTQLACGEDDTAEK 537
Qy 540 R---KRFHDLQDVLOKAFHEDEKENDRSGLSSSSSSTS 574
Db 538 RLQKKQRYMEIQETLKKAFSEDNLELGNSSSLTDSSTS 576
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RESULT 9

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US-09-934-455-74
; Sequence 74, Application US/09934455
; Publication No. US20030121070A1
; GENERAL INFORMATION:
; APPLICANT: Adam, Luc
; APPLICANT: Creelman, Robert
; APPLICANT: Dubell, Arnold
; APPLICANT: Heard, Jacqueline
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Keddie, James
; APPLICANT: Pilgrim, Marsha
; APPLICANT: Ratcliffe, Oliver
; APPLICANT: Reuber, Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Pineda, Omaira
; TITLE OF INVENTION: Genes for Modifying Plant Traits IV
; FILE REFERENCE: MBI-0025
; CURRENT APPLICATION NUMBER: US/09/934,455
; PRIOR FILING DATE: 2001-08-22
; PRIOR APPLICATION NUMBER: 60/227439
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: MBI-0022
; PRIOR FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: MBI-0023
; PRIOR FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 516
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 74
; LENGTH: 593
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-934-455-74
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Query Match 43.2%; Score 1276; DB 11; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
Matches 273; Conservative 113; Mismatches 163; Indels 28; Gaps 9;
Qy 5 TSHVTNAPSDDSASVEBGDADADVEALRRLSDNLAARSPDFDAFLADARIAPGG 64
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Db 17 TSFVATDNTDSSIVYLAEEQVLTGPDVSALQLLSNSFESVFDSPDD---FYSDAKLVL--- 71
Qy 65 GGGGDLRVHRCVLSARSPPFLRGVFAARRAAAAAGGGGGSERLELRELLGGGGEVEVG 124
Db 72 -SDGREVSFHRVLSARSFFKSALA--AAKKEKDSNNNTAAVKLELKEI---AKDYEVG 124
Qy 125 YEALRLVLDLYSGRVGDLPKAACLCVDEDCAHVGCHPAVAFMAQVLFAASTFQVAELTN 184
Db 125 FDSVTVLAVYSSVRPPKGVSECADENCCVACRPADVDFWLVYLAIFKIPELIT 184
Qy 185 LFORLLDVLKVEVDNLLILSVANLCKNCKMLERCLDMVVRNSLDMITLKSLLPPD 244
Db 185 LYQRHLLDVVDKVIETDVLILKLANICGKACMKLLDRCKEIIIVKSNVDMVLSKSLPEE 244
Qy 245 VIKQIIDARLSGLISPENKGFPHKVRIRHRLDSDDDVELVRLMLLTEGQTNLDADFALH 304
Db 245 LVKEIIDRRKEGLEVPKVK---KHVSNVHKAALSDDDIELVKLLKEDHTNLDACALH 300
Qy 305 YAVEHCDSKITTELLDALADVNHRNPRGYTVLHIAARRREPKEIIVSLITKGPADVTF 364
Db 301 FAVACNVKTATDLKLDADVNHRNPRGYTVLHVAARKKEPOLILSLLEKGSASEATL 360
Qy 365 DGRKAVQISKRTKQGDYFVTEGKPSKORLCIELEQAERPPQGEASVSLAMAGE 424
Db 361 EGRITMIAKQATMAVECNIPQCKHSLKGRLCVEILEQEDKREQIPRDVPPPSFAVAAD 420
Qy 425 SLRGRLLYLENRVALARIMFMEARVAMDIQVDTGLTFENLGSANPPPER---QRTTV 480
Db 421 ELKMTLLDLENVALAQRFPTEAQAAMEIAEMKGTCEFIVTS---LEPDRLTGKTSP 477
Qy 481 DLNESPFIMKEEHLARMTALSKTVELGKRPFCNSVLDKIMD-DETDVPSLGRDTSAEK 539
Db 478 GVKIAPFRILEHQSRLKALSKTVELGKRPFCNSAVLDQIMNCELTQLACGEDDTAEK 537
Qy 540 R---KRFHDLQDVLOKAFHEDEKENDRSGLSSSSSSTS 574
Db 538 RLQKKQRYMEIQETLKKAFSEDNLELGNSSSLTDSSTS 576
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RESULT 10

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US-09-848-841-17
; Sequence 17, Application US/09848841
; Publication No. US2003017241A1
; GENERAL INFORMATION:
; APPLICANT: E. I. du Pont de Nemours and Company
; APPLICANT: Butler, Karla
; APPLICANT: Falco, Carl
; APPLICANT: Famodu, Omolayo O.
; APPLICANT: Fang, Yiwen
; APPLICANT: Han, Feng
; APPLICANT: Heppard, Elmer
; APPLICANT: Liu, Zhan-Bin
; APPLICANT: Miao, Gou-Hau
; APPLICANT: Odell, Joan
; APPLICANT: Rafaleki, Antoni
; TITLE OF INVENTION: Disease Resistance Factors
; FILE REFERENCE: BBI252 US NA1
; CURRENT APPLICATION NUMBER: US/09/848,841
; CURRENT FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: 60/107,242
; PRIOR FILING DATE: 1998-11-05
; PRIOR APPLICATION NUMBER: US99/25,953
; PRIOR FILING DATE: 1999-10-04
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 17
; LENGTH: 593
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-848-841-17
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```
Query Match 43.2%; Score 1276; DB 12; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
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Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;
QY 5 TSHVTNAPSDDSDASVEGDADADVEALRRSLDNLAAPRSPEDFAFLADARIAVPGG 64
Db 17 TSFVATDNTDSSIVYLAEEQVLTGPDVSALQLSNSFESVFDSPDD--FYSDAKLVL--- 71
QY 65 GGGGDLVHRCVLSARSPFLRGVFAARRAAAAGGGGDSERLELRELLGGGGEVEVG 124
Db 72 -SDGREVSFHRCLVSARSFFKSALA--AAKKEKDSNNNTAAVKLEKEI---AKDYEVG 124
QY 125 YEALRLVLDLYSGRVGDLPKAACLCVDEDCAHVCHPAPVAFMAQVLFPAASTFQVAELTN 184
Db 125 FDSVVTVLAYVYSSRVPPKGVSCADENCHVACRPVDFMFLVLYLAFIKIPELIT 184
QY 185 LFQRLLDVLDKVEVDNLLILSVANLKNKSCMKLLERCLDMVVRNSLDMITLKSLLPD 244
Db 185 LYQRHLLDVVDKVIETDLVILKLANICGKACMKLLDRCKEIIVKSNDVMSLEKSLPEE 244
QY 245 VIKQIIDARLSLGLISPENKGFNNKHVRIHRAALSDDDVELVRLMLLTGQTNLDDAFALH 304
Db 245 LVKEIIDRRKELGLEVPKVK----KHVSNVHKALSDDDIELVKLLKEDHTNLDACALH 300
QY 305 YAVEHCDSKIITTELDLADLVNHRNPRGYTVLHIAARRRBPKIIVSLTTKGARADVTF 364
Db 301 FAVAYCNVKTATDLKLADLVNHRNPRGYTVLHVAAWRKEPQLILSLLEKGSASEATL 360
QY 365 DGRKAVQISKLTQOGDYFGVTEEGKPSKDRLCIEILEQAERRDPQGEASVSLAMAGE 424
Db 361 EGR TALMAKQATMAVECNPIEQCKHSLKGRCLVEILLEQEDKREQIIPRDVPPSFAVAAD 420
QY 425 SLRGRLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPER-----ORTTV 480
Db 421 ELKMTLLDLENRVALAQRLLFPTEAQAAMEIAEMKGTCEFI VTS---LEPDRLTGKRTSP 477
QY 481 DLNESPFIMKEBHLARMTALSKTVELGKRFPRCSNVLDKIND--DETDPVSLGRDTSAEK 539
Db 478 GVKIAPFRILEBHQSRKALSKTVELGKRFPRCSAVLDQIMNCEDLTQLACGEDDTAEK 537
QY 540 R----KRFHDLQDVLOKAFHEDKEENDRSGLSSSSSSSTS 574
Db 538 RLQKKRYMEIQETLKKAFSEDNLELGNSSSLTDSSTS 576

RESULT 11
US-10-225-068-242
; Sequence 242, Application US/10225068
; Publication No. US20030217383A1
; GENERAL INFORMATION:
; APPLICANT: Mendel Biotechnology, Inc.
; APPLICANT: Reuber, T. Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Heard, Jacqueline E.
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Adam, Luc J.
; APPLICANT: Dubell, Arnold T.
; APPLICANT: Ratcliffe, Oliver
; APPLICANT: Pineda, Omaisra
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Broun, Pierre E.
; TITLE OF INVENTION: STRESS-RELATED POLYNUCLEOTIDES AND
; FILE OF INVENTION: POLYPEPTIDES IN PLANTS
; CURRENT APPLICATION NUMBER: US/10/225,068
; CURRENT FILING DATE: 2002-08-09
; PRIOR APPLICATION NUMBER: 60/310,847
; PRIOR FILING DATE: 2001-08-09
; PRIOR APPLICATION NUMBER: 60/336,049
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/338,692
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: 10/171,468
; PRIOR FILING DATE: 2002-06-14
; NUMBER OF SEQ ID NOS: 246
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; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 242
; LENGTH: 593
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (2)...(593)
; OTHER INFORMATION: Conserved domain
US-10-225-068-242

Query Match 43.2%; Score 1276; DB 12; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-105;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;
QY 5 TSHVTNAPSDDSDASVEGDADADVEALRRSLDNLAAPRSPEDFAFLADARIAVPGG 64
Db 17 TSFVATDNTDSSIVYLAEEQVLTGPDVSALQLSNSFESVFDSPDD--FYSDAKLVL--- 71
QY 65 GGGGDLVHRCVLSARSPFLRGVFAARRAAAAGGGGDSERLELRELLGGGGEVEVG 124
Db 72 -SDGREVSFHRCLVSARSFFKSALA--AAKKEKDSNNNTAAVKLEKEI---AKDYEVG 124
QY 125 YEALRLVLDLYSGRVGDLPKAACLCVDEDCAHVCHPAPVAFMAQVLFPAASTFQVAELTN 184
Db 125 FDSVVTVLAYVYSSRVPPKGVSCADENCHVACRPVDFMFLVLYLAFIKIPELIT 184
QY 185 LFQRLLDVLDKVEVDNLLILSVANLKNKSCMKLLERCLDMVVRNSLDMITLKSLLPD 244
Db 185 LYQRHLLDVVDKVIETDLVILKLANICGKACMKLLDRCKEIIVKSNDVMSLEKSLPEE 244
QY 245 VIKQIIDARLSLGLISPENKGFNNKHVRIHRAALSDDDVELVRLMLLTGQTNLDDAFALH 304
Db 245 LVKEIIDRRKELGLEVPKVK----KHVSNVHKALSDDDIELVKLLKEDHTNLDACALH 300
QY 305 YAVEHCDSKIITTELDLADLVNHRNPRGYTVLHIAARRRBPKIIVSLTTKGARADVTF 364
Db 301 FAVAYCNVKTATDLKLADLVNHRNPRGYTVLHVAAWRKEPQLILSLLEKGSASEATL 360
QY 365 DGRKAVQISKLTQOGDYFGVTEEGKPSKDRLCIEILEQAERRDPQGEASVSLAMAGE 424
Db 361 EGR TALMAKQATMAVECNPIEQCKHSLKGRCLVEILLEQEDKREQIIPRDVPPSFAVAAD 420
QY 425 SLRGRLLYLENRVALARIMFPMEARVAMDIQVDTGLEFNLGSGANPPPER-----ORTTV 480
Db 421 ELKMTLLDLENRVALAQRLLFPTEAQAAMEIAEMKGTCEFI VTS---LEPDRLTGKRTSP 477
QY 481 DLNESPFIMKEBHLARMTALSKTVELGKRFPRCSNVLDKIND--DETDPVSLGRDTSAEK 539
Db 478 GVKIAPFRILEBHQSRKALSKTVELGKRFPRCSAVLDQIMNCEDLTQLACGEDDTAEK 537
QY 540 R----KRFHDLQDVLOKAFHEDKEENDRSGLSSSSSSSTS 574
Db 538 RLQKKRYMEIQETLKKAFSEDNLELGNSSSLTDSSTS 576

RESULT 12
US-10-079-035-3
; Sequence 3, Application US/10079035
; Publication No. US20020152499A1
; GENERAL INFORMATION:
; APPLICANT: Ryals, John
; APPLICANT: Delaney, Terry
; APPLICANT: Friedrich, Lealie
; APPLICANT: Weymann, Kristiana
; APPLICANT: Lawton, Kay
; APPLICANT: Ellis, Daniel
; APPLICANT: Uknes, Scott
; APPLICANT: Jesse, Taco
; APPLICANT: Vos, Pieter
; TITLE OF INVENTION: GENE ENCODING A PROTEIN INVOLVED IN THE
; FILE OF INVENTION: SIGNAL TRANSDUCTION CASCADE LEADING TO SYSTEMIC ACQUIRED RESIS
; TITLE OF INVENTION: IN PLANTS
```

NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. US20002015249A, Artis Corporation
STREET: 520 White Plains Road, P.O. Box 2005
CITY: Tarrytown
STATE: New York
COUNTRY: USA
ZIP: 10591
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/079,035
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/577,799
FILING DATE:
APPLICATION NUMBER: 08/880,179
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: CGC 1909
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 593 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-10-079-035-3

Query Match 43.2%; Score 1276; DB 14; Length 593;
Best Local Similarity 47.2%; Pred. No. 8.7e-109;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;
QY 5 TSHVTNAPSDSDASVEEGDADADVEALRLSDNLAARSPEDFAFLADARIVPGG 64
DB 17 TSFVATDNTDSSIVYLAEEQVLTPDVSALQLLSNFSFVDPDPD--FYSDAKLVL--- 71
QY 65 GGGGDLVRHRCVLSARGSPFLRGVFAARRAAAAGGEGDGERLEIRLLGGGSEVEVG 124
DB 72 -SDGREVSFHRCLVLSARGSPFLRGVFAARRAAAAGGEGDGERLEIRLLGGGSEVEVG 124
QY 125 YEALRLVLDLYSGRVDLPKACLCVDEDCAHVCHPAVAFMAOVLFPAASTFQVAELTN 184
DB 125 FDSVTVTLAYVYSSVRPPKGVSECCADNCHVACRPVDFMELVLYLAFLFKIPELIT 184
QY 185 LFQRLDLVDKVEVDNLLILSVANLCNCKMLLERCLDMVRSNLDMLTLEKSLPDD 244
DB 185 LYQRLDLVDKVEVDNLLILSVANLCNCKMLLERCLDMVRSNLDMLTLEKSLPDD 244
QY 245 VIKQIIDARLSGLSPENKGPKNHRIHRAALSDVDVLMVLLTEGQTNLDFAFLH 304
DB 245 LVKEIIDRRKELGLEVPVKV----KHVSNVHKAALSDVDVLMVLLTEGQTNLDFAFLH 300
QY 305 YAVEHCDSKITTELDLADLVNHNPRGYTVLHAAARRRPEKIIIVSLITKGAADVTFF 364
DB 301 FAVAYCNKTAFTDLKLDLADLVNHNPRGYTVLHAAARRRPEKIIIVSLITKGAADVTFF 360
QY 365 DGRKAVQISKRITKQDYGVTGTEGKSPKDRLCIEILEQARRRPPQCEASVSLAMAGE 424
DB 361 EGRALMIKQATMAVECNNEIQCKHSLKGLCVLEILEQARRRPPQCEASVSLAMAGE 420
QY 425 SLRGRLLYENRVALARIMFMEARVAMDAIAQVDTGLEFNLGSGANPPPP-----QRTTV 480
DB 421 ELKMTLLLENRVALAQRLLFPTQAQAAMEIAEMKGTCEFIVTS---LBPDRITGTKRTSP 477

QY 481 DLNESPFTMKEEHLARMTALSKTVELGKRPFRCSNVLDKIMD-DETPVSLGRDTSAEK 539
DB 478 GVKIAPFRILEHQSRKALSKTVELGKRPFRCSNVLDKIMD-DETPVSLGRDTSAEK 537
QY 540 R----KRFHDLQDVLOKAFHEDKEENDRSGLSSSSSSSTS 574
DB 538 RLQKKQRYMEIQETLKKAFFSEDNLELGNSSSLTDSSTS 576
RESULT 13
US-10-328-675A-6
; Sequence 6, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDI
; CURRENT APPLICATION NUMBER: US/10/328,675A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 6
; LENGTH: 579
; TYPE: PRT
; ORGANISM: Brassica napus
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (6)...(6)
; OTHER INFORMATION: Xaa is either Gly or Arg
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (19)...(19)
; OTHER INFORMATION: Xaa is either Leu or Pro
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (34)...(34)
; OTHER INFORMATION: Xaa is either Tyr or Phe
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (39)...(39)
; OTHER INFORMATION: Xaa is either Phe or Leu
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (97)...(97)
; OTHER INFORMATION: Xaa is either Ala or Thr
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (151)...(151)
; OTHER INFORMATION: Xaa is either Glu or Asp
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (196)...(196)
; OTHER INFORMATION: Xaa is either Asn or Ile
; FEATURE:
; NAME/KEY: Misc_Feature
; LOCATION: (242)...(242)
; OTHER INFORMATION: Xaa is either Asp or Asn
; US-10-328-675A-6
Query Match 41.4%; Score 1222.5; DB 12; Length 579;
Best Local Similarity 45.9%; Pred. No. 7.2e-104;
Matches 260; Conservative 110; Mismatches 160; Indels 37; Gaps 10;
QY 14 DSDASVEEGDADADVEALRLSDNLAARSPEDFAFLADARIVPGGSGGGGDLRV 73
DB 27 NGSSTVXPTXLTXPVSAFQLLNSLESVDFSP--AFYSDAKLVL---SDDKEYSF 80

Qy	107	RLEIRELLGGGEBEVEGYEALRIULVDLYLSGRVGDLPKAAACLCVDEDCAHVGCHPAVAF	166
Db	110	KLQJKEI---ARDYEVGFSVAVLAYVYSGRVSRPPKGASACVDDDCCHVACRSKVDF	165
Qy	167	MAQVLFAASTFQVAELTNLFORRLDLDVKVEVNNLLILSVANLCNKSCKMLLERCLDM	226
Db	166	MVEVLYLSFVFQIQELVTLVERQFLEIVDKVWVEDILVIFKLDLTCGTTYKKLDRCEIEI	225
Qy	227	VVRSNLDMITLEKSLPDPVIKQIIDARLSLGLISPENKGFPNKHVRRIHRAALDSDDOVELV	286
Db	226	IVKSDIELVLEKSLPOHIFKQIIDREALCELPKEU---RHVKNYIKALDSDDOVELV	281
Qy	287	RMLLTGQTNLDDAFALHYAVEHCDSKITTELLDALADVNHRNRPGRVTVLHIAARRRP	346
Db	282	KMLLEGHTNLDEAYALHPAIAHCAVKTAYDLELELADVNLRNRPGRVTVLHVAAMRKEP	341
Qy	347	KIIVSLTITKGARPADVTDFGRKAVQIISKRLTKQGDYFGVTBEGKPSPKDRLCIEILEQAE	406
Db	342	KLIISLLMKGANILDTTLDGRTALVIVKRLTKADDYKTSBEDGTPSKLGGLCIEVLEH-E	400
Qy	407	RRPQLG--EASVSLAMAGESLRGRLLYLENRVALARIMFPMPEARVANDIAQVDGTLFEN	464
Db	401	QKLEYLSPIEASLSPTVPEELNRLLIYYENVALARLLFVETETVQIGIAKLEETCEFT	460
Qy	465	LGSGANPPPE--RORTTVDLNESPFIMKEEHLARMTALSKTVELGKRFPPRCNSVLDKTM	522
Db	461	-ASLEPDHHIGEKTSLDNLNMAPQIHEKHLNRDLRCLCKTVELGKRYFKRCS--LDHPM	517
Qy	523	DDE--TDPVSLGRDT---SAEKRRPFHDLQDVLOKAFHEDKEENDRSGLSSSSSSTSGA	577
Db	518	DTEDNLHASVEEDTPKRLQKQRYMELQETLTKTFSEDKEE---CGKSSTPKPTS--A	572
Qy	578	IRPRR	582
Db	573	VRNRR	577

RESULT 15

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US-09-934-455-434
; Sequence 434, Application US/09934455
; Publication No. US20030121070A1
; GENERAL INFORMATION:
; APPLICANT: Adam, Luc
; APPLICANT: Creelman, Robert
; APPLICANT: Dubell, Arnold
; APPLICANT: Heard, Jacqueline
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Keddle, James
; APPLICANT: Pilgrim, Mareha
; APPLICANT: Racciffe, Oliver
; APPLICANT: Reuber, Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Pineda, Omaira
; TITLE OF INVENTION: Genes for Modifying Plant Traits IV
; FILE REFERENCE: MBI-0025
; CURRENT APPLICATION NUMBER: US/09/934,455
; CURRENT FILING DATE: 2001-08-22
; PRIORITY APPLICATION NUMBER: 60/227439
; PRIOR FILING DATE: 2000-08-22

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; PRIOR APPLICATION NUMBER: MBI-0022
; PRIOR FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: MBI-0023
; PRIOR FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 516
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 434
; LENGTH: 601
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-09-334-455-434

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Query Match

	Best Local Similarity	45.8%; Pred. No. 5.2e-103;			
	Matches	Conservative 105;	Mismatches 172;	Indels	Gaps 17;
QY	1	MEPTSHVTNAFSDSDSASVEEGD	---ADADAD---	---VEALARLSDNLAAFR	46
Db	2	MATITTTTARFSDSYFSSNTSGNS	PFAABSSLDYFTFLTPPEVSAL	KLLNSCLSFVD	61
QY	47	SPEDFAFIADARIAPVGGGGGGDLR	VHRCVLSARSFFLRGVFARRAAA	AAAGGGGEGDSE	106
Db	62	SPE--TFYSDAKLVL---	AGGREVSPHRCILSARIP---	VF-KSALATVKEQKSSTTV	110
QY	107	RLELRBELLGGGGEVEVGYEALRL	LDLYLSGRVGDLPKAAACL	CVDEDCAHVGHCPAVAF	166
Db	111	KLQLEKEI---	ARDYEGVDFDSVAVLAVYSGR	VPSPKASACVDDDCCHVACKSKVDF	166
QY	167	NAQVLFAASTTQVAELTNL	FORRLDVLVDKVEVDNLLIL	SVANLCNCKSMKLLERCLDM	226
Db	167	MVEVLVLSFVQIQELVTL	VERQFLEIVDKVVVEDIL	VIFKLDLTCGTTYKKLDRCEIE	226
QY	227	VYRSNLDMITLEKSLPPDVTKI	QIDARLSGLISPENKGF	PNKHVRIRHRLDSDDDVLV	286
Db	227	IVKSDIELVLEKSLPQHIFKQI	IDIREALCLPCKLE---	RHKVNIYKALDSDDDVLV	282
QY	287	RMLLTGEGTNLDDAFALHAYAVE	HCOSKITTELLDLAGLVNHN	PRGYTVLHIAARREP	346
Db	283	KMLLEGTNLDDEAYALHFAHCA	VKATYADLLELELADVNLR	PNRGYTVLHVAAWRKEP	342
QY	347	KIIVSLLTKGARPADVFDGRKA	VQIKRUTKQGDYFGVTEG	KSPDRLCIEILEQAE	406
Db	343	KLIISLLMKGANILDTL	DGRTALVIVKRLTKADDY	KTSTEDGTSLKGGLCIEVLEH-E	401
QY	407	RDPOLG--EASVSLAMAGESLR	GLLYLENRVVALARIIMPP	MEARVAMDAIQVDGTLSEFN	464
Db	402	OKLEYLSPIEASLSLPTPEEL	RMLLYYENRVVALARLIP	PEVETETVQGIKLEETCEFT	461
QY	465	LGSGANPPE--RQTTVDINESP	FMKEEHLAMTALSKTVELG	KRFFPRCSNVLDKIM	522
Db	462	ASSLEPDHHIGEKRTSLDLN	MAPQTHEKHLGRALCKTV	ELGKRYFKPCS--LDHFM	518
QY	523	DDE--TDVPVSLGRDT---	SABKRRFRHDLQDVLOK	AFHEDKENDRSGLSSSSSTSCA	577
Db	519	DTEDNLHLASVEEDTPEKRL	QKQRYMELQETLMKTF	SEDKEE---CGKSTPKETS--A	573
QY	578	IRPRR	582		
Db	574	VSNSR	578		

Search completed: December 4, 2003, 19:26:20
Job time : 37 secs

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OM protein - protein search, using sw model

Run on: December 4, 2003, 19:16:14 ; Search time 21 Seconds
(without alignments)
1172.615 Million cell updates/sec

Title: US-09-294-539-4
Perfect score: 2952
Sequence: 1 MEPTSHVNAFSDSDASV.....RSLSSSSSTSGAIRPRR 582

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pap.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pap.*
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6: /cgn2_6/ptodata/1/iaa/backfiles1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1737	58.8	576	4	US-09-519-232-4
2	1672.5	56.7	588	4	US-09-519-232-2
3	1629	55.2	604	4	US-09-519-232-64
4	1276	43.2	593	2	US-08-989-478-2
5	1276	43.2	593	3	US-08-996-685-2
6	1276	43.2	593	3	US-08-880-179-3
7	1270	43.0	593	2	US-08-989-478-8
8	1270	43.0	593	3	US-08-996-685-8
9	1222.5	41.4	579	4	US-09-519-232-6
10	1213.5	41.1	600	4	US-09-519-232-20
11	1213.5	41.1	601	4	US-09-519-232-72
12	1188.5	40.3	521	2	US-08-989-478-12
13	1188.5	40.3	521	3	US-08-996-685-12
14	1134	38.4	469	2	US-08-989-478-10
15	1134	38.4	469	3	US-08-996-685-10
16	1087	36.8	621	4	US-09-551-778-2
17	1087	36.8	621	4	US-09-551-778-4
18	1060.5	35.9	591	4	US-09-519-232-66
19	1052.5	35.7	397	2	US-08-989-478-14
20	1052.5	35.7	397	3	US-08-996-685-14
21	1045.5	35.4	609	4	US-09-569-804-11
22	1045	35.4	607	4	US-09-569-804-10
23	1031	34.9	586	4	US-09-519-232-8
24	1009	34.2	574	4	US-09-519-232-70
25	995	33.7	475	4	US-09-569-804-4
26	971.5	32.9	601	4	US-09-519-232-18
27	844.5	28.6	409	4	US-09-569-804-21

28	825	27.9	217	4	US-09-519-232-46
29	823	27.9	219	4	US-09-519-232-30
30	782.5	26.5	381	4	US-09-569-804-17
31	751	25.4	261	2	US-08-989-478-16
32	751	25.4	261	3	US-08-996-685-16
33	678	23.0	369	4	US-09-519-232-74
34	644	21.8	165	4	US-09-519-232-38
35	614	20.8	165	4	US-09-519-232-40
36	599	20.3	165	4	US-09-519-232-42
37	502.5	17.0	180	4	US-09-569-804-35
38	493	16.7	165	4	US-09-519-232-58
39	485	16.4	165	4	US-09-519-232-32
40	477	16.2	165	4	US-09-519-232-34
41	470	15.9	165	4	US-09-519-232-48
42	461.5	15.6	158	4	US-09-519-232-50
43	450	15.2	165	4	US-09-519-232-44
44	441	14.9	165	4	US-09-519-232-56
45	425.5	14.4	166	4	US-09-519-232-54

ALIGNMENTS

RESULT 1
US-09-519-232-4
; Sequence 4, Application US/09519232
; Patent No. 6528702
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weiolo, Laura
; APPLICANT: Willits, Michael
; APPLICANT: Mengiste, Tesfaye
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: S-30857A/RT2095
; CURRENT APPLICATION NUMBER: US/09/519,232
; CURRENT FILING DATE: 2000-03-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 4
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Lycopersicon esculentum
US-09-519-232-4

Query Match	58.8%	Score 1737;	DB 4;	Length 576;
Best Local Similarity	59.9%	Pred. No. 1.6e+168;		
Matches 349;	Conservative 94;	Mismatches 108;	Indels 32;	Gaps 8;
Qy	11	AFSDSDSAS-----VEGDADADADVEALRRLSDNLAAAF-RSPEDFAFLADARIAVP	62	
Db	6	AFSDSDISGSSSSICCMNESETSL-ADVNSLKRILSETLESIFDASAPDFFADAKLLAP	64	
Qy	63	GGGGGGGDLRVHRCVLSARSPFLRGVFARRAAAAAGGGGDSERLEURELLGGGGEVE	122	
Db	65	-----GGKEIPVHRCILSARSFFKNVFC-----GDSSTKLELKLUM----KEYE	106	
Qy	123	VGYEALRLVDLYSGRVGLDLPKAAACLCVDBDCAHVGCHPAVAFMAQVLFPAASTFQVAEL	182	
Db	107	VSPDAVSVLAYLYSGKVPASKDCVCDNECLHVACRPVAFMVQVLYASFQISQL	166	
Qy	183	TNLFQRLLDVLDKVEVDNLLILSVANLCKNSCKLLERCLDMVVRNLMITLKSLP	242	
Db	167	VDFQRHLDDLDKAVADDMMVLNVANICGKACERLLSRCIDIIIVKSNVDIITLDSLP	226	
Qy	243	PDVTKQIIDARLSGLISPEKNGFPNKHVRIHRLSDDDVLRMLLTETGOTNLDDAFA	302	
Db	227	HDIVKQITDSRAELGLOGPESNGPDKHVKRIHRLSDDDVELLRMLLKEGHTTLDLDA	286	
Qy	303	LHYAVEHCDSKITTELLDALADVYNHNRNPRGYTVLHIAARRRREPKEIIVSLITKGA	362	
Db	287	LHYAVACDATTAEILLDLSLADVNHQNPGRHTVLHVAAMKEPKIIVSLITKGA	346	
Qy	363	TFDGRKAVQISKRLTKQGDYFGVTEGPKSPKRLCIEILLEQABRRDPQLGEASVSLA	422	

Db 347 TSDGKALQAKRLTRLVDTTKSTEGKSAPKDRICIEILQEARDDPLGASLSLAMA 406
 QY 423 GESLRGLLYENRVALARIMFMEARVAMDIQAQDGTLEFNIGSGANPPPERQRTVDL 482
 Db 407 GDLRMKLLYLENRVGLAKLLFPMEAKVAMDIQAQDGTSELPLASMKKIADAQRTVDL 466
 QY 483 NESPFIMKEHRLARMTALSKTVELGKRFPPRCNSVLDKIM--DDETDPVSLGRDTSAE-- 538
 Db 467 NEAPFKMKKEHLNRLRALSRTVELGKRFPPRCSEVLNKNKMDADDLSEIAYMGNDTVBERQ 526
 QY 539 -KKRFRHDLQDVLOKAFHEDKEENDRSGLSSSSSSSTSGAIRP 580
 Db 527 LKQRYMELQELSKAFTEDKEBFKTNMSSSCSSTSGKGVDPK 569

RESULT 2

US-09-519-232-2
 ; Sequence 2, Application US/09519232
 ; Patent No. 6528702
 ; GENERAL INFORMATION:
 ; APPLICANT: Salmeron, John
 ; APPLICANT: Weislo, Laura
 ; APPLICANT: Willits, Michael
 ; APPLICANT: Mengiste, Tesfaye
 ; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
 ; CURRENT APPLICATION NUMBER: US/09/519,232
 ; CURRENT FILING DATE: 2000-03-06
 ; NUMBER OF SEQ ID NOS: 74
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; TYPE: PRT
 ; LENGTH: 588
 ; ORGANISM: Nicotiana tabacum
 US-09-519-232-2

Query Match 56.7%; Score 1672.5; DB 4; Length 588;
 Best Local Similarity 56.8%; Pred. No. 6.6e-162;
 Matches 336; Conservative 102; Mismatches 119; Indels 35; Gaps 8;
 QY 11 AFSDSASVEE-----GDADADADVEALRLRLSDNLAFAF--RSPEDFAFLAD 56
 Db 7 AFSDSNDISGSSSICIGGMMTEFFSPETSPAEITSLKRLSETLESIFDASLPEDFYAD 66
 QY 57 ARIAVPGGGGGDLRVHRCVLSARSPLRGVFAARRAAAGGGGDSERLELBELGG 116
 Db 67 AKLVV---SGPCKEIPVHRKILSARSPPFKNLFC-----GKKEKNSSKVELKEVM-- 113
 QY 117 GGEVEVGYEALRLVLDLYSGRVGDLPKAACLCVDEDCAHVGHCPAVAFNAQVLAFAAST 176
 Db 114 --KEHEVSYDAVMSVLAYLSKVRPSKDCVCVDNDCSHVACRPVAFVLEVLYTSFT 171
 QY 177 FQVABLNTLFORLLDVLQKVEVDNLLILSVANLCNKSCKMLLERCLDMVVRNLDMIT 236
 Db 172 FQISELVKFORHLLDILDKTAADVMVLSVANI--CGKACERLLSSCIEIIVKSNVDIIT 231
 QY 237 LEKSLPPDVVIOIIDARLSGLISPENKGFNKHVRTHRALDSDDVELVWMLLTGOTN 296
 Db 232 LDKALPHIVKQITUSRAELGQGESNGFPDKVKRTHRALDSDDVELLQMLREGHTT 291
 QY 297 LDDAFALHYAVEHCDISKITTELLDALADVNRNPRGYTVLHIAARRREPKEIIVSLLTG 356
 Db 292 LDDAVALHYAVAYCDAKTAETLLELDLADINHNSRGYTVLHVAAMRKEPKIIVSLLTG 351
 QY 357 ARPADVTGKAVOISKRLTKQGYFGVTEGKPSKDRICIEILBOAERDDQLGEAS 416
 Db 352 ARPSDLTSDGRKALQIAKRLTLVDFSKSPGEGKASNDRLCIEILEOARERDPLLEAS 411
 QY 417 VSLMAGESLGRLLYLENRVALARIMFMEARVAMDIQAQDGTLEFNIGSGANPPPERQ 476
 Db 412 VSLWAGDGLRWKLLYLENRVGLAKLLFPMEAKVAMDIQAQDGTSEFFPLASIGKMANAQ 471

QY 477 RTVDLINESPFIKKEHRLARMTALSKTVELGKRFPPRCNSVLDKIM--DDETDPVSLGRD 534
 Db 472 RTVDLNEAPFKIKEEHLNRLRALSRTVELGKRFPPRCSEVLNKNKMDADDLSEIAYMGND 531
 QY 535 TSAE---KKRFRHDLQDVLOKAFHEDKEENDR--SGLSSSSSSSTSGAIRP 582
 Db 532 TAERQLKQRYMELQELTKAFTEDKEEYDKTNNISSSCSSTSGKGVDPKPK 583

RESULT 3

US-09-519-232-64
 ; Sequence 64, Application US/09519232
 ; Patent No. 6528702
 ; GENERAL INFORMATION:
 ; APPLICANT: Salmeron, John
 ; APPLICANT: Weislo, Laura
 ; APPLICANT: Willits, Michael
 ; APPLICANT: Mengiste, Tesfaye
 ; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
 ; FILE REFERENCE: S-30857A/RTP2095
 ; CURRENT APPLICATION NUMBER: US/09/519,232
 ; CURRENT FILING DATE: 2000-03-06
 ; NUMBER OF SEQ ID NOS: 74
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 64
 ; LENGTH: 604
 ; TYPE: PRT
 ; ORGANISM: Beta vulgaris
 US-09-519-232-64

Query Match 55.2%; Score 1629; DB 4; Length 604;
 Best Local Similarity 57.4%; Pred. No. 1.9e-157;
 Matches 343; Conservative 81; Mismatches 130; Indels 44; Gaps 10;
 QY 11 AFSDSASAS-----VEEGDADADVEALRLRLSDNLAFAF--SPED 50
 Db 15 AFSDSNDISGSSSICCVAAATTTTAAENSLSTFPAALLRLSENLSLFPQSLSLSD 74
 QY 51 PAFIADARIAPVPGGGGGDLRVHRCVLSARSPLRGVFAARRAAAGGGGDSER--- 107
 Db 75 SDSPADAKIVV---SGDSREVAHVHRCVLSRSSPFRSAFASKREKEK---ERDKERVVK 127
 QY 108 LEIRELGGGEEVEVGYEALRLVLDLYSGRVGDLPKAACLCVDEDCAHVGHCPAVAFM 167
 Db 128 LELKDLAG---DPEVGDSVAVGLYSGKVRNLPRGICVCDVEDCSHEACRPADVDFV 183
 QY 168 AQVLAFASTFQVABLNTLFORLLDVLQKVEVDNLLILSVANLCNKSCKMLLERCLDMV 227
 Db 184 VEVLVLSHKEFEIVELVSLYQRLHLLDILDKIAPDDVLVLSVAEMCGNACDGLLARCIDI 243
 QY 228 VRNLDMITLEKSLPPDVVIOIIDARLSGLISPENKGFNKHVRTHRALDSDDVELVR 287
 Db 244 VRSDIDVTIDKSLPQNVVKQIITDKELGFTBFGVVEFPDKVKKRTHRALESDDVELVR 303
 QY 288 MLTGETGNTLDDAFALHYAVEHCDISKITTELLDALADVNRNPRGYTVLHIAARRREP 347
 Db 304 MLKERTHTLDDAVALHYAVAHCAKTTTTELLGLADVNLRLNGHTVLHVAAMRKEPK 363
 QY 348 IIVSLLTGKARPADVTGKAVOISKRLTKQGYFGVTEGKPSKDRICIEILEOAR 407
 Db 364 IIVSLLTGKAHPSDITSDDKKALQIAKRLTKAVDFYKTTTEGQKADPKDRICIEILEOAR 423
 QY 408 RDPOLGEASVSLWAGESLGRLLYLENRVALARIMFMEARVAMDIQAQDGTLEFNIGS 467
 Db 424 REPLLGEVSVLAKAGDGLRWKLLYLENRVALARLLFPMEAKVAMDIQAQDGTSEFFLSK 483
 QY 468 GANPPPERQRTTVLDLINESPFIKKEHRLARMTALSKTVELGKRFPPRCNSVLDKIM--DE 525
 Db 484 NI--ADARNNAVDLNEAPFILKEEHLQMKALSKTVELGKRFPPRCSDVLNKNMDAEDL 540
 QY 526 TDPVSLGRDTSAB---KKRFRHDLQDVLOKAFHEDKEENDRSGLSSSSSSSTSGAIRP 580
 Db 541 SQLAFLGKDTPEERQRRKRKRYLELOALTKAFTEDKEEFDRLSTLSSSSSSSTSPMG--RP 596

;; PRIOR APPLICATION DATA: US 60/034,379
;; APPLICATION NUMBER: US 60/034,379
;; FILING DATE: 27-DEC-1996
;; PRIOR APPLICATION DATA: US 60/034,382
;; APPLICATION NUMBER: US 60/034,382
;; FILING DATE: 27-DEC-1996
;; PRIOR APPLICATION DATA: US 60/034,730
;; APPLICATION NUMBER: US 60/034,730
;; FILING DATE: 10-JAN-1997
;; PRIOR APPLICATION DATA: US 60/035,021
;; APPLICATION NUMBER: US 60/035,021
;; FILING DATE: 10-JAN-1997
;; PRIOR APPLICATION DATA: US 60/035,022
;; APPLICATION NUMBER: US 60/035,022
;; FILING DATE: 10-JAN-1997
;; PRIOR APPLICATION DATA: US 08/875,015
;; APPLICATION NUMBER: US 08/875,015
;; FILING DATE: 16-JUL-1997
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Meigs, J. Timothy
;; REGISTRATION NUMBER: 38,241
;; REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
;; TELEPHONE: (919) 541-8587
;; TELEFAX: (919) 541-8689
;; INFORMATION FOR SEQ ID NO: 2:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 593 amino acids
;; TYPE: amino acid
;; TOPOLOGY: linear
;; MOLECULE TYPE: protein
;; US-08-996-685-2

Query Match 43.2%; Score 1276; DB 3; Length 593;
Best Local Similarity 47.2%; Pred. No. 2.2e-121;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

QY 5 TSHVTNFAFSDSASVEEGDADADVEALRRLSDNLAARSPEDFAFLADARIAVPGG 64
DB 17 TSFVATDNTDSSIVYLAEEQVLTGPDVSAQLLSNFSFVDPDPD--FYSDAKLVL--- 71

QY 65 GGGGGLRVHRCVLSARSFPLRGVFAARRAAAGGGGDSERLELRLGGGEEVEVG 124
DB 72 -SDGREVSFHRVLSARSFFKSALA--AAKKEKDSNNTAAVKLEKEI---AKDYEVG 124

QY 125 YEALRLVLDYLSGRVGDLPKAAACLCVDEDCAHVGHCPAVAFMAOVLFFAASTFOVAELTN 184
DB 125 FDSVTVLAYVYSSRVPPKGVSECADENCCCHVACRPVDFMELVLYLAFIKFIPELIT 184

QY 185 LPQRLLDVLKVEVDNLLILSVANLKNKCMKLLERCLDMVVRNLDMLITLKSLLPD 244
DB 185 LYQRHLLDVVDKVVIEDTLVILKLANICGKACMKLDRCKEITVKSNDVMSLEKSLPEE 244

QY 245 VIKQIIDARLSLGLSPENKGFNKHRIHALDSDVDVLRMLLTETGQNLDDAFALH 304
DB 245 LVKEIIDRRKELGLEVPVKV----KHVSNVHKALSDSDIELVKLLKEDHTNLDACALH 300

QY 305 YAVEHCDSKITTELLDLADLVNHNPRGYTVLHIAARRRPPKTIIVSLTLTKGARPADVTF 364
DB 301 FAVACNVKTATDLLKDLADVHNHNPGRGYTVLVHVAAMKRPQILSLLEKGAASEATL 360

QY 365 DGRKAVQISKRLTKOGDYFGVTEEGKPSKORLCIEIIEQAEERRDPQIGEASVSLAMAGE 424
DB 361 EGRALMIAKQATWAVECNIPQEQCKSLKGRCLVLEIQEDKREQIPRDVPPPSFAVAAD 420

QY 425 SLRGLLYLNRVALRTWFMPEARVAMDIAQVDTGLEFNLSGANPPPER----QRTTV 480
DB 421 ELKMTLLDLNRLVALQRLFTPEAQAAEIIAEMKGTCEFI VTS---LEPDLRTGTKRTSP 477

QY 481 PINESPFIKBEHLARMTALSKTVELGKRFPFRCSNVLDKIMD-DETPDVSIGRDTSAEK 539

Db 478 GVKIAPFRILEHOSRLKALSKTVELGKRFPFRCSAVLDQIMNCEDLTQLACGEDDTAKK 537

QY 540 R---KRFHDLQDVLQKAFHEDKBEENDRSGLSSSSSSSTS 574
Db 538 RLQKKQRYMEIQETLKKAFSEDNLELGNSSLTDTSSSTS 576

RESULT 6
US-08-880-179-3
; Sequence 3, Application US/08880179
; Patent No. 6091004
; GENERAL INFORMATION:
; APPLICANT: Ryals, John
; APPLICANT: Delaney, Terry
; APPLICANT: Friedrich, Leslie
; APPLICANT: Weymann, Kristianna
; APPLICANT: Lawton, Kay
; APPLICANT: Ellis, Daniel
; APPLICANT: Uknes, Scott
; APPLICANT: Jesse, Taco
; APPLICANT: Vos, Pieter
; TITLE OF INVENTION: GENE ENCODING A PROTEIN INVOLVED IN THE
; TITLE OF INVENTION: SIGNAL TRANSDUCTION CASCADE LEADING TO SYSTEMIC ACQUIRED RESIS
; TITLE OF INVENTION: IN PLANTS
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6091004artis Corporation
; STREET: 520 White Plains Road, P.O. Box 2005
; CITY: Tarrytown
; STATE: New York
; COUNTRY: USA
; ZIP: 10591
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/880,179
; FILING DATE:
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: CGC 1909
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (919) 541-8587
; TELEFAX: (919) 541-8689
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 593 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-880-179-3

Query Match 43.2%; Score 1276; DB 3; Length 593;
Best Local Similarity 47.2%; Pred. No. 2.2e-121;
Matches 273; Conservative 113; Mismatches 165; Indels 28; Gaps 9;

QY 5 TSHVTNFAFSDSASVEEGDADADVEALRRLSDNLAARSPEDFAFLADARIAVPGG 64
DB 17 TSFVATDNTDSSIVYLAEEQVLTGPDVSAQLLSNFSFVDPDPD--FYSDAKLVL--- 71

QY 65 GGGGGLRVHRCVLSARSFPLRGVFAARRAAAGGGGDSERLELRLGGGEEVEVG 124
DB 72 -SDGREVSFHRVLSARSFFKSALA--AAKKEKDSNNTAAVKLEKEI---AKDYEVG 124

QY 125 YEALRLVLDYLSGRVGDLPKAAACLCVDEDCAHVGHCPAVAFMAOVLFFAASTFOVAELTN 184
DB 125 FDSVTVLAYVYSSRVPPKGVSECADENCCCHVACRPVDFMELVLYLAFIKFIPELIT 184

[illegible]

RESULT 7

```

US-08-989-478-8
; Sequence 8, Application US/08989478
; Patent No. 5986082
; GENERAL INFORMATION:
; APPLICANT: Uknes, Scott
; APPLICANT: Hunt, Michelle
; APPLICANT: Steiner, Henry-York
; APPLICANT: Ryals, John
; TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
; TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 5986082artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 5986082th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: US/08/989,478
; CLASSIFICATION:
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 60/033,177
; FILING DATE: 13-DEC-1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,379
; FILING DATE: 27-DEC-1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,382
; FILING DATE: 27-DEC-1996
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,730
; FILING DATE: 10-JAN-1997
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,021
; FILING DATE: 10-JAN-1997
; PRIORITY APPLICATION DATA:

```

APPLICANT: Kung, Ruth
APPLICANT: Kesemann, Helmut
APPLICANT: Oostendorp, Michael
TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6031153artis Corporation
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6031153th Carolina
COUNTRY: USA
ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996,685
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/761,543
FILING DATE: 6-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,378
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,024
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/875,015
FILING DATE: 16-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 593 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-996-685-8

Query Match 43.0%; Score 1270; DB 3; Length 593;
Best Local Similarity 47.0%; Pred. No. 9e-121;
Matches 272; Conservative 113; Mismatches 166; Indels 28; Gaps 9;

QY 5 TSHVTFAPSDSDSASVEEGDADADVEALRLSDNLAAFRSPDEFALADARIAVPGG 64
DB 17 TSPVATNDTSSIVYLAARQVLTGPDVSALQLLSNFEAVFAPDD--FYSDAKLVL--- 71
QY 65 GGGGGLRVRHRCVLSARSFPLRGVFARRAAAAGGGGDSERLERLGGGEEVEVG 124

125 -SDGREVSHRCVLSARSFFKSALA--AAKKEKSDNNTAAVKLELKEI-----AKDYEVG 124
125 YEALRLVLDLYISGRVGDLPKAAACLVDEDCAHVGHCHPAVAFMAQVLFPAASTQVAVELTN 184
125 FDSVVTVLAYVYSSRVPPKPGVSECADENCCCHVACRPVDFMLEVLYLAFIKPELIT 184
185 LFORRLDLDVLDKVEVDNLLILSVANLNCNCKMLERCLDMVVRNLDMLTEKSLPPD 244
185 LYQRHLLDVVDKVVIEDTLVLKLANICGKACMKLLDRCKEIIIVKSNVDMVSLKSLPEE 244
245 VIKQIIDARLSGLISPENKGFNFKNVRRIRHALDSDDELVELVRMLLTEGOTNLDPAFLH 304
245 LVKEIIDRRKELGLEVPKVK----KHSVNVHKALDSDDIELVKLLKEDHTNLDACALH 300
305 YAVEHCDSKITTELLDLALADVNRHPRGTVLHIAARRREPKLIIVSLLTGKARPADTVF 364
301 FAVAYCNVKTATDLKLDLADVNRHPRGTVLHIAARRREPQILISLLEKGSASATL 360
365 DGRKAVOISKRLTKQGDYFGVTBEGKPSKDRICIEILEQAERRDPOLGSEASVSLAMAGE 424
361 EGRALMIAQATWAVECNIPQCKHSLKGRCLCVELLEQEDKREIQIPRDVPFSFAVAD 420
425 SLRGRLLYLENRVALARIMPMEARVAMDIAQVDGTLFNLGSGANPPPR-----QRTTV 480
421 ELKMTLLDLNLRVALAQRLLFTEAQAAMEIAEMKGTCEFTVTS---LEPDLRTGKRTSP 477
481 DLNESPFIMKEEHLARMTALSKTVELGKRFPRCSNVLDKIMD-DETDVPVSLGRDTSAEK 539
478 GVKIAPFRILEEHQSRKLSKTVELGKRFPRCSNVLDKIMD-DETDVPVSLGRDTSAEK 537
540 R---KRFHDLQVLOKAPHEDKEENDRSGLSLSSSSSSS 574
538 RLQKKQRYMEIQETLKAFSEDNLELGNLSLTDSTSTSS 576

RESULT 9
US-09-519-232-6
Sequence 6, Application US/09519232
Patent No. 6528702
GENERAL INFORMATION:
APPLICANT: Salmeron, John
APPLICANT: Weislo, Laura
APPLICANT: Willits, Michael
APPLICANT: Mengiste, Tesfaye
TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
FILE REFERENCE: S-30857A/RTP2095
CURRENT APPLICATION NUMBER: US/09/519,232
CURRENT FILING DATE: 2000-03-06
NUMBER OF SEQ ID NOS: 74
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 6
LENGTH: 579
TYPE: PRT
ORGANISM: Brassica napus
US-09-519-232-6

Query Match 41.4%; Score 1222.5; DB 4; Length 579;
Best Local Similarity 45.9%; Pred. No. 6.2e-116;
Matches 260; Conservative 110; Mismatches 160; Indels 37; Gaps 10;

QY 14 DSDSASVEEGDADADVEALRLSDNLAAFRSPDEFALADARIAVPGGGGGGDLRV 73
DB 27 NSGSTVXPTLXTRPEVSAPQLLSNLSVDFDSPE--AFYSDAKLVL---SDDKEVSF 80
QY 74 HRCVLSARSFPLRGVFARRAAAAGGGGDSERLERLGGGEEVEVGVEALRLVLD 133
DB 81 HRCVLSARS-----LFFKAALXAAEKVKSTPVKLELKL-----AAEVDVGFSDSVAVLA 131
QY 134 YLXSGRVGDLPKAACLCVDEDCAHVGHCHPAVAFMAQVLFPAASTQVAVELTNLFORRLD 193
DB 132 YVYSGRVPPKPGVSECADXSCHVACRPVDFMLEVLYLAFVFOIQELVTMYQRHLVD 191
QY 194 LDKVEVDNLLILSVANLNCNCKMLERCLDMVVRNLDMLTEKSLPPDVIKQIIDAR 253

Db 192 VDKXIEDTLVVLKLANICGKACKLFDKCEIIVKSNVDVVTLLKSLUPEXIAQVIDIR 251
Qy 254 LSLGLISPENKGFNKHVRRIRHRLDSDDELVRMLLTEGQTNLDLAFALHYAVEHCDSK 313
Db 252 KELGLEVAE---PEKHVSNIHKALESDDLVLVMLLKEGHTNLDEAYALHFAVAYCDEK 307
Qy 314 ITTELDDALADVNRHNRPGYTVLHIAARRREPKIIVSLTLKGARPADVTFDGRKAVOIS 373
Db 308 TARNLLGLFADVNRHNRPGYTVHVAAMRKEPTLIALLLTKGANALEMSLDGRTALLIA 367
Qy 374 KRLTKQGDYFGVTBEGKSPDRLCIEILEQAE--RDPOLGEASVSLAMAGESLGRLLY 432
Db 368 KQVTKAECC--ILEKGKLAAGVCVEILKQDNTREFFEDVSPSLAADAQFKIRLID 426
Qy 433 LENRVALARIMFMEARVAMDIQVGDGLEFNLGSGANPPPERQRTTVDLINESPIMKEE 492
Db 427 LENRVQMARCLYPMEAQVAMPARMKGTREVV-----TTATDLHMEPPKFVEM 475
Qy 493 HLAHWALSKVELGKRFPPRCNSVLDKIMDE--TDPVSLGRDT---SAEKRKRFRHDLQ 547
Db 476 HOSRLTALSKTVEFGKRFPPRCNSVLDKIMDE--TDPVSLGRDT---SAEKRKRFRHDLQ 547
Qy 548 DVLOKAFHEDKEENDRSLGSSSSSTS 574
Db 536 EIVQAFSKEDDLGKSLSSSSSTS 562

RESULT 10

US-09-519-232-20

; Sequence 20, Application US/09519232

; Patent No. 6528702

; GENERAL INFORMATION:

; APPLICANT: Salmeron, John

; APPLICANT: Weislo, Laura

; APPLICANT: Willits, Michael

; APPLICANT: Mengiste, Tesfaye

; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF

; FILE REFERENCE: S-30857A/RTP2095

; CURRENT APPLICATION NUMBER: US/09/519,232

; CURRENT FILING DATE: 2000-03-06

; NUMBER OF SEQ ID NOS: 74

; SOFTWARE: Patent In Ver. 2.1

; SEQ ID NO 20

; LENGTH: 600

; TYPE: PRT

; ORGANISM: Arabidopsis thaliana

US-09-519-232-20

Query Match 41.1%; Score 1213.5; DB 4; Length 600;

Best Local Similarity 45.8%; Pred. No. 5.4e-115;

Matches 277; Conservative 105; Mismatches 172; Indels 51; Gaps 17;

Qy 1 MEPTSHVTNFAFSDSASVBECD---ADADAD-----ADADAD-----VEALRLRLSDNLAAFR 46
Db 1 MATTTTTTARFSDSYEFNSGNSFFAAESSLDYPTFTLTPPEVSALKLLSNCLESYFD 60
Qy 47 SPEDFAFLADARIAVPGGGGGDLRVHRCVLSARSPLRGVFAARRAAAAAGGGGDCGSE 106
Db 61 SPE--TFVSDAKVL---AGGREVSFHCILSARIP-----VF-KSALATVKEQKSTTV 109
Qy 107 RLELRLLGGGEEVEGYEALRLVLDYLSGRVGDLPKAAACLVDEDCAHVGCHPAVAF 166
Db 110 KLQKLEI---ARDYEVGFDVVAIVAYVSGRVSPPKASACVDDCCCHVACRSKVD 165
Qy 167 MAQVLPFAASTFQVAELTNLFORLLDVLKVEVDNLLILSVANLCNCKSMKLLERCLDM 226
Db 166 MVEVLYLSFVFIQELVLYERQFLIYDKVVDVILVFKLDLTLCGTTTKLLDRCIEI 225
Qy 227 VVRNLDMLTEKSLPPDVIKQIIDARLSGLISPENKGFNKHVRRIRHRLDSDDELV 286
Db 226 IVKSDIELVLSLEKSLPQHFQIIDIREALCLEPPKLE---RHVKNIYKALDSDDELV 281

Qy 287 RMLLTGQTNLDLAFALHYAVEHCDSKITTELLDLALADVNRHNRPGYTVLHIAARRREP 346
Db 282 KMLLLEGHNTLDEAYALHFAIACAVKTAYDVLLELELADVNLNRPRGYTVLHVAAMRKEP 341
Qy 347 KIIIVSLTLTKGARPADVTFDGRKAVOISKRLTKQGDYFGVTBEGKSPDRLCIEILEQAE 406
Db 342 KLIISLLMKGANIUDTLDGRTALVIVKRLTKADYKSTSTEDGTPSLKGGJCIEVLEH-E 400
Qy 407 RRDPLG--EASVSLAMAGESLGRLLYLENRVALARIMFMEARVAMDIQVODGTLEFN 464
Db 401 QKLEVLSPIEASLSLPTPELRMLRLLYYENRVALARLLFPVETETVQGIKLEBETCEFT 460
Qy 465 LGSGANPPPE--RORTTVDLINESPIMKEEHLARMTALSKVELGKRFPPRCNSVLDKIM 522
Db 461 -ASSLEPDHIGEKRTSLDLNMAPFQIHEKHLRALCKTVELGKRYFKCS--LDHFM 517
Qy 523 DDE--TDPVSLGRDT---SAEKRKRFRHDLQVLOKAFHEDKEENDRSLGSSSSSTSIGA 577
Db 518 DTEDLNHLASVEEDTPKRLQKORYMELQETLMKTFSEDKEE---CGKSTPKPTS--A 572
Qy 578 IRPRR 582
Db 573 VRSNR 577

RESULT 11

US-09-519-232-72

; Sequence 72, Application US/09519232

; Patent No. 6528702

; GENERAL INFORMATION:

; APPLICANT: Salmeron, John

; APPLICANT: Weislo, Laura

; APPLICANT: Willits, Michael

; APPLICANT: Mengiste, Tesfaye

; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF

; FILE REFERENCE: S-30857A/RTP2095

; CURRENT APPLICATION NUMBER: US/09/519,232

; CURRENT FILING DATE: 2000-03-06

; NUMBER OF SEQ ID NOS: 74

; SOFTWARE: Patent In Ver. 2.1

; SEQ ID NO 72

; LENGTH: 601

; TYPE: PRT

; ORGANISM: Arabidopsis thaliana

US-09-519-232-72

Query Match 41.1%; Score 1213.5; DB 4; Length 601;

Best Local Similarity 45.8%; Pred. No. 5.5e-115;

Matches 277; Conservative 105; Mismatches 172; Indels 51; Gaps 17;

Qy 1 MEPTSHVTNFAFSDSASVBECD---ADADAD-----ADADAD-----VEALRLRLSDNLAAFR 46
Db 2 MATTTTTTARFSDSYEFNSGNSFFAAESSLDYPTFTLTPPEVSALKLLSNCLESYFD 61
Qy 47 SPEDFAFLADARIAVPGGGGGDLRVHRCVLSARSPLRGVFAARRAAAAAGGGGDCGSE 106
Db 62 SPE--TFVSDAKVL---AGGREVSFHCILSARIP-----VF-KSALATVKEQKSTTV 110
Qy 107 RLELRLLGGGEEVEGYEALRLVLDYLSGRVGDLPKAAACLVDEDCAHVGCHPAVAF 166
Db 111 KLQKLEI---ARDYEVGFDVVAIVAYVSGRVSPPKASACVDDCCCHVACRSKVD 166
Qy 167 MAQVLPFAASTFQVAELTNLFORLLDVLKVEVDNLLILSVANLCNCKSMKLLERCLDM 226
Db 167 MVEVLYLSFVFIQELVLYERQFLIYDKVVDVILVFKLDLTLCGTTTKLLDRCIEI 226
Qy 227 VVRNLDMLTEKSLPPDVIKQIIDARLSGLISPENKGFNKHVRRIRHRLDSDDELV 286
Db 227 IVKSDIELVLSLEKSLPQHFQIIDIREALCLEPPKLE---RHVKNIYKALDSDDELV 282
Qy 287 RMLLTGQTNLDLAFALHYAVEHCDSKITTELLDLALADVNRHNRPGYTVLHIAARRREP 346
Db 283 KMLLLEGHNTLDEAYALHFAIACAVKTAYDVLLELELADVNLNRPRGYTVLHVAAMRKEP 342


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; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 469 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-989-478-10

Query Match      38.4%; Score 1134; DB 2; Length 469;
Best Local Similarity 51.4%; Pred. No. 4.8e-107;
Matches 233; Conservative 89; Mismatches 115; Indels 16; Gaps 5;

QY 131 VLDLYSGRVDLPKAAACLVDEDCAHVGHCHPAVAFMAQVLFAASTFQVAELTNLFORRL 190
DB 7 VLAVYSSRVPPPGVSECADENCCHVACPAPVDFMLEVLYLAFIFKIPELITLYQRHL 66

QY 191 LDVLDKVEVDNLLILSVANLCNKSCKMLERCLDMVRSNLDMTLEKSLPPDVVKQII 250
DB 67 LDVVDKVVIEDTLVILKLANICGKACMKLLDRCKEIIVKSNDVMVSLKSLPEELVKKEII 126

QY 251 DARLSGLISPENKGFNKHVRRIHRAALSDDDVELVRMLLTGQTNLDDAFALHVAVEHC 310
DB 127 DRKELGLEVPKVK----KHVSNVHKALDSDDIELVKLLKEDHTNLDACALHFAVAYC 182

QY 311 DSKITTELDLADLVNHNPRGYTVLHIAARRREPKEIIVSLTTKGARPADVTFDGRKAV 370
DB 183 NVKTATDILLDLADVNHNPRGYTVLHVAAMRKPEQLISLLEKGSASEATLEGRAL 242

QY 371 QISKRLTKQDYFGVTEGKSPKDRLCIEILEQARRDPOLGEASVSLAMAGESLRGL 430
DB 243 MIAKOATWAVECNPIEQCKHSLKRLCVELLEQDKREIQPRDVPVPSFAVADELKMTL 302

QY 431 LYLENRVALARIMFPEARVAMDAQVDTLEFNLGSCANPPPER---QRTVDLNEPS 486
DB 303 LDLENRVALAORLFFTEAQAAMEIAEMKGTCEFIIVTS---LEPDLTGTKRTSPGVKIAP 359

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,685
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/761,543
; FILING DATE: 6-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,378
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,379
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,382
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,730
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,021
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,022
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,024
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/875,015
; FILING DATE: 16-JUL-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (919) 541-8587
; TELEFAX: (919) 541-8589
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 469 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-996-685-10

Query Match      38.4%; Score 1134; DB 3; Length 469;
Best Local Similarity 51.4%; Pred. No. 4.8e-107;
Matches 233; Conservative 89; Mismatches 115; Indels 16; Gaps 5;

QY 131 VLDLYSGRVDLPKAAACLVDEDCAHVGHCHPAVAFMAQVLFAASTFQVAELTNLFORRL 190
DB 7 VLAVYSSRVPPPGVSECADENCCHVACPAPVDFMLEVLYLAFIFKIPELITLYQRHL 66

QY 191 LDVLDKVEVDNLLILSVANLCNKSCKMLERCLDMVRSNLDMTLEKSLPPDVVKQII 250
DB 67 LDVVDKVVIEDTLVILKLANICGKACMKLLDRCKEIIVKSNDVMVSLKSLPEELVKKEII 126

QY 251 DARLSGLISPENKGFNKHVRRIHRAALSDDDVELVRMLLTGQTNLDDAFALHVAVEHC 310
DB 127 DRKELGLEVPKVK----KHVSNVHKALDSDDIELVKLLKEDHTNLDACALHFAVAYC 182

QY 311 DSKITTELDLADLVNHNPRGYTVLHIAARRREPKEIIVSLTTKGARPADVTFDGRKAV 370
DB 183 NVKTATDILLDLADVNHNPRGYTVLHVAAMRKPEQLISLLEKGSASEATLEGRAL 242

QY 371 QISKRLTKQDYFGVTEGKSPKDRLCIEILEQARRDPOLGEASVSLAMAGESLRGL 430
DB 243 MIAKOATWAVECNPIEQCKHSLKRLCVELLEQDKREIQPRDVPVPSFAVADELKMTL 302

QY 431 LYLENRVALARIMFPEARVAMDAQVDTLEFNLGSCANPPPER---QRTVDLNEPS 486
DB 303 LDLENRVALAORLFFTEAQAAMEIAEMKGTCEFIIVTS---LEPDLTGTKRTSPGVKIAP 359
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[illegible]

Search completed: December 4, 2003, 19:21:47
Job time : 23 secs



1	2020.8	99.1	2194	12	US-09-848-841-9	Sequence 9, Appl
2	590.2	28.9	1731	12	US-10-328-675A-3	Sequence 3, Appl
3	563.4	27.6	1767	12	US-10-328-675A-1	Sequence 1, Appl
4	563.4	27.6	2172	8	US-08-908-884-13	Sequence 13, Appl
5	563.4	27.6	2172	9	US-09-908-323-13	Sequence 13, Appl
6	562	27.5	2296	12	US-10-328-675A-63	Sequence 63, Appl
7	422.2	20.7	2104	8	US-08-908-884-2	Sequence 2, Appl
8	422.2	20.7	2104	9	US-09-908-323-2	Sequence 2, Appl
9	422.2	20.7	2104	11	US-09-934-455-73	Sequence 73, Appl
10	422.2	20.7	2104	12	US-10-325-068-241	Sequence 241, App
11	381.8	18.7	1740	12	US-10-328-675A-5	Sequence 5, Appl
12	380.4	18.6	1803	12	US-10-328-675A-19	Sequence 19, Appl
13	380.4	18.6	1818	12	US-10-328-675A-71	Sequence 71, Appl
14	380.4	18.6	2083	11	US-09-934-455-433	Sequence 433, App
15	359.8	17.6	653	12	US-10-328-675A-45	Sequence 45, Appl
16	351.6	17.2	2717	12	US-09-848-841-15	Sequence 15, Appl

QY 61 GAGAGGGGACCGCGACCGCGACCGCGACCGCGAGCGGCTCTCCGCGCTCTCCGACAA 120
Db 188 GAGAGGGGGCGCGCGACCGCGACCGCGACCGCGAGCGGCTCTCCGCGCTCTCCGACAA 247
QY 121 CTCGCGCGGGGCTTCGGCTCGCGCGAGGCTTCGGCTTCCTCGCGCGCGCGCGATCGCC 180
Db 248 CTCGCGCGGGGCTTCGGCTCGCGCGAGGCTTCGGCTTCCTCGCGCGCGCGCGATCGCC 307
QY 181 CTCGCGCGGGGCGCGCGCGCGCGCGACCTTCGGGGTGCACCGCTCGGCTCTCTCCGCG 240
Db 308 CTCGCGCGGGGCGCGCGCGCGCGCGACCTTCGGGGTGCACCGCTCGGCTCTCTCCGCG 367
QY 241 CGGAGCCCTTCCTCGCGGGGCTTCGGGGGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 300
Db 368 CGGAGCCCTTCCTCGCGGGGCTTCGGGGGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 427
QY 301 GCGAGGATGGCAGGAGGCTGAGCTTCGGGAGCTTCCTCGGGGCGCGCGCGCGCGAG 360
Db 428 GCGAGGATGGCAGGAGGCTGAGCTTCGGGAGCTTCCTCGGGGCGCGCGCGCGCGAG 487
QY 361 GTGAGGTCGGGTACGAGCGCTCGCGGTGCTGCTCGACTACCTCTACGCGCGCGCTC 420
Db 488 GTGAGGTCGGGTACGAGCGCTCGCGGTGCTGCTCGACTACCTCTACGCGCGCGCTC 547
QY 421 GCGAGCTGCCCAAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 480
Db 548 GCGAGCTGCCCAAGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 607
QY 481 CACCCCGCGCTTCATGCGCGAGGCTTCCTTCGCGCGCTCCACCTTCAGCTCGCC 540
Db 608 CACCCCGCGCTTCATGCGCGAGGCTTCCTTCGCGCGCTCCACCTTCAGCTCGCC 667
QY 541 GAGCTCACCAACTCTTCAGCGGGCTTCCTTCGATGCTTCCTTCGATGCTTCGATGCT 600
Db 668 GAGCTCACCAACTCTTCAGCGGGCTTCCTTCGATGCTTCCTTCGATGCTTCGATGCT 727
QY 601 AACCTTCATGATCTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Db 728 AACCTTCATGATCTTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 787
QY 661 GAAAGATGCTTCGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720
Db 788 GAAAGATGCTTCGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 847
QY 721 TTGCTTCAGATGCTTATCAAGCAGATTTATGATGCTGCTGCTGCTGCTGCTGCTGCTG 780
Db 848 TTGCTTCAGATGCTTATCAAGCAGATTTATGATGCTGCTGCTGCTGCTGCTGCTGCTG 907
QY 781 CCAGAAACCAAGGATTTCTTAACAAACATGTGAGGAGATACAGAGCCCTTCGACTCT 840
Db 908 CCAGAAACCAAGGATTTCTTAACAAACATGTGAGGAGATACAGAGCCCTTCGACTCT 967
QY 841 GAGATGTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCT 900
Db 968 GAGATGTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCT 1027
QY 901 TTGCACTGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCT 960
Db 1028 TTGCACTGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCTAGCT 1087
QY 961 CTCGCACTTCGAGATGCTTATCATAGAAACCAAGAGGTTATCTGCTTCACATGCT 1020
Db 1088 CTCGCACTTCGAGATGCTTATCATAGAAACCAAGAGGTTATCTGCTTCACATGCT 1147
QY 1021 GCGAGCGAAGAGAGCTTAAATCATATGCTCCCTTTTAAACCAAGGGGCTCGACAGCA 1080
Db 1148 GCGAGCGAAGAGAGCTTAAATCATATGCTCCCTTTTAAACCAAGGGGCTCGGCGAGCA 1207
QY 1081 GATGTTACATTCGATGGGAGAAAGCGGTTCAATCTCAAAAGACTTCAAAACCAAGGG 1140
Db 1208 GATGTTACATTCGATGGGAGAAAGCGGTTCAATCTCAAAAGACTTCAAAACCAAGGG 1267

QY 1141 GATTACTTTGGGTTACCGAAGAGGAAACCTCTCCAAAGATAGTTATGTATTGAA 1200
Db 1268 GATTACTTTGGGTTACCGAAGAGGAAACCTCTCCAAAGATAGTTATGTATTGAA 1327
QY 1201 ATACTGGAGCAAGCTGAAAAGAGGACCCCAACTCTCGGAGAGCATCAGTTTCTCTGCA 1260
Db 1328 ATACTGGAGCAAGCTGAAAAGAGGACCCCAACTCTCGGAGAGCATCAGTTTCTCTGCA 1387
QY 1261 ATGCGAGGTGAGAGTCTACGAGAGAGGTTGCTGTATCTTGAACCCGAGTTGCTTTCGCA 1320
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QY 1321 AGGATTAATGTTTCGATGGAGGCAAGAGTAGCAATGATATTGCTCAAGTGGATGGAAT 1380
Db 1448 AGGATTAATGTTTCGATGGAGGCAAGAGTAGCAATGATATTGCTCAAGTGGATGGAAT 1507
QY 1381 TTGGAATTTAACTCGGTTCTGTTGCAAACTCCACTCTCTGAAAGACAAACGAGCAACTGTT 1440
Db 1508 TTGGAATTTAACTCGGTTCTGTTGCAAACTCCACTCTCTGAAAGACAAACGAGCAACTGTT 1567
QY 1441 GATCTAAATGAAGTCTCTTTCATTAATGAAGAGAAACACTTTAGCTCGGATGACAGCACTC 1500
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QY 1501 TCCAAAACAGTGGAGCTCGGAAAACGCTTTTCCCGGATGTTCCGAACTGCTCGACAAG 1560
Db 1628 TCCAAAACAGTGGAGCTCGGAAAACGCTTTTCCCGGATGTTCCGAACTGCTCGACAAG 1687
QY 1561 ATCATGATGATGAAACTGATCCGTTTCCCTCGGAGAGACACGCTCGCGGAGAGAGG 1620
Db 1688 ATCATGATGATGAAACTGATCCGTTTCCCTCGGAGAGACACGCTCGCGGAGAGAGG 1747
QY 1621 AAGAGGTTTCATGACCTGCGAGGATGTTCTTCAGAGGACATTCACGAGGACAAAGAGGAG 1680
Db 1748 AAGAGGTTTCATGACCTGCGAGGATGTTCTTCAGAGGACATTCACGAGGACAAAGAGGAG 1807
QY 1681 AATGACAGGTCGGGGCTCTCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1740
Db 1808 AATGACAGGTCGGGGCTCTCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1867
QY 1741 AGGAGATGAAACCACTGCTCCCAATAGTTGCGCATATTGATAGTAACTGCTCTCTG 1800
Db 1868 AGGAGATGAAACCACTGCTCCCAATAGTTGCGCATATTGATAGTAACTGCTCTCTG 1927
QY 1801 AGCTACTCACCTGATGTTGCTTCTGTCATTTGCCCCCAATATATCTCAATGTTT 1860
Db 1928 AGCTACTCACCTGATGTTGCTTCTGTCATTTGCCCCCAATATATCTCAATGTTT 1987
QY 1861 AGGCTTGTACAGTATTAGTTCTTACAGCTATTGCCCGCTCAATTGTGAAACGAGAGTT 1920
Db 1988 AGGCTTGTACAGTATTAGTTCTTACAGCTATTGCCCGCTCAATTGTGAAACGAGAGTT 2047
QY 1921 TCACTAGTCTTGTACTGAGGTGTAATACAGTCTGTAATTTGAGTTGCTGCTGCTGCTGCTG 1980
Db 2048 TCACTAGTCTTGTACTGAGGTGTAATACAGTCTGTAATTTGAGTTGCTGCTGCTGCTG 2107
QY 1981 TTTCCAGTGGTTGCTCGTAAATAATGAGATGATTTCTTGGCTCCCAAAAAA 2040
Db 2108 TTTCCAGTGGTTGCTCGTAAATAATGAGATGATTTCTTGGCTCCCAAAAAA 2167

RESULT 2

US-10-328-675A-3

; Sequence 3, Application US/10328675A

; Publication No. US20030159171A1

; GENERAL INFORMATION:

; APPLICANT: Salmoron, John

; APPLICANT: Weislo, Laura

; APPLICANT: Willits, Michael

; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF

; FILE REFERENCE: 30857USNPDI1

; CURRENT APPLICATION NUMBER: US/10/328, 675A

; CURRENT FILING DATE: 2002-12-23


```
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1731
; TYPE: DNA
; ORGANISM: Lycopodium esculentum
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1728)
; OTHER INFORMATION: Full length tomato cDNA sequence
US-10-328-675A-3

Query Match      28.9%; Score 590.2; DB 12; Length 1731;
Best Local Similarity 65.2%; Pred. No. 3.2e-126;
Matches 906; Conservative 0; Mismatches 468; Indels 15; Gaps 2;

Qy 356 AGGAGTGGAGTGGGTACGAGCGCTGCGGCTGGTCTCGACTACCTTACAGCGGCC 415
Db 308 AAGAGTATGAGTGAGTTTGTATGCGGTGCTCAGTGTGCTCGCTATTGTATAGTGA 367
Qy 416 CGCTCGGCGACTGCCAAGCGGCGCTGCTGCTCGAGGAGACTGCCGCCACGTGCG 475
Db 368 AAGTTAGCGCTGCATCTAAGATGTGTGTTGTGTGACAAATGAGTGTGCAATGAG 427
Qy 476 GGTGCCACCCCGCGCTGCTATGCGCGAGTCTCTTGGCGCCCTCCACCTTCCAGG 535
Db 428 CTGTGAGCGCAGCTGTGCGCTTCATGTTTGTAGGTTTGTAGCGCTCTTACCTTCA 487
Qy 536 TCGCGAGCTCACCAACCTCTTCCAGCGCGTCTCTTGTATGTCCTTGATAGGTGAAG 595
Db 488 TCTCTCAATTGGTCACAAGTTTTCAGACACCTATTGGATATTCTTGACAAAGCTGAG 547
Qy 596 TAGATAACCTTCTATTGATCTATCTGTGCGAATTTATGCAAACTTTCATGCAAAAC 655
Db 548 CAGATGATGTAATGATGTTTATCCGTTGCAAACTTTGCGGTAAAGCATGTGAAAGAT 607
Qy 656 TGCTTGAAGAGTCCCTGATAGTGTAGTCCGCTCAAACTTGCATGATTTACTCTTGAGA 715
Db 608 TACTTTCAAGATGCATGATATTATTGCAAGTCTAATGTTGATATCAATCCCTTGATA 667
Qy 716 AGTCATTCCTCCAGATGTTATCAAGCAGATTAATGATGCACGCTCAAGCCTCGGATTA 775
Db 668 AGTCCTTCCTCATGACATTTGTAACAACTCACTGATTCAGTCTGAACTTGTGCTGCG 727
Qy 776 TTTACACAGAAAACAGGATTTCTTAACAACATGTGAGGAGGATACACAGAGCCTTG 835
Db 728 AAGGCGCTGNAAGCAATGGTTTCTGTATAAATGTTAAGAGGATACATAGAGCATTTGG 787
Qy 836 ACTCTGACGATGTAGAGCTAGTCAAGATGCTGCTCACTGAAGGACAGACAAATCTTGATG 895
Db 788 ACTCTGATGATGTTGAATTAAGATGTTCTTAAGAGGCGATCTACTCTTGATG 847
Qy 896 ATGCGTTTGCATGCACTACGCGCTCGAACTTTGACTTCCAAAATTTACAAACCGAGCTTT 955
Db 848 ATGCATATGCTCTCCACTATGCTGTAGCATATTGCGATGCAAGACTACAGAGAACTTT 907
Qy 956 TGGATCTCGCACTTCGAGATGTTATCATAGAAACCCAGAGGTTTATCTGTTCTTCA 1015
Db 908 TAGATCTTTCACTTCTGATGTTAATCATCAAAATCCTAGAGGACACACGCTACTCATG 967
Qy 1016 TTGCTGCGAGGGAAGAGAGCCTTAAATCATTTGCTCCCTTTTAAACAGGGGCTCGAC 1075
Db 968 TTGCTGCCATGAGGAAGAACCTTAAATTTATAGTGTCCCTTTTAAACAGGAGCTAGAC 1027
Qy 1076 CAGCAGATGTTTACATTCGATGGGAAAGCGGTTCAAAATCTCAAAAAGACTTAAACAAAC 1135
Db 1028 CTTCTGATCTGACATCCGATGCAAAAAGGACCTTCAAAATCTCAAGAGGCTCACTAGC 1087
Qy 1136 AAGGGATTAATCTTTGGGTTACCGAAGAGGAAACCTTCTCCAAAAGATAGTTATGTA 1195
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Db 1088 TTGTAGATTTTACCAAGTCTACAGAGGAGGAAATCTGCTCCAAAGGATCGGTTATGCA 1147
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Db 1148 TTGAGATTTCTGGAGCAAGCAGAAAGAGAGATCCACTACTAGGAGAACTTCATTATCTC 1207
Qy 1256 TTGCAATGGCAGGTGAGAGTCTACAGAGAAAGTTGCTGTATCTTTGAAAACCGAGTTGCTT 1315
Db 1208 TTGCTATGGCAGGCGATGATTTGCGTATGAAGCTGTTATACCTTTGAAAATAGAGTTGTC 1267
Qy 1316 TGGCAAGGATTTATGTTTCCGATGAGGCAAGTAGCAATGGAATATTGCTCAAGTGGATG 1375
Db 1268 TGGCTAAACTCTTTTCCCATGGAAGAAAGTTGCAATGACATTTGCAAGTGGATG 1327
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Db 1388 CAGTGGATTTTGAACGAGGCTCTCTTCAAGATGAAAGAGGAGCCTTGAATCGGCTTAGG 1447
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Db 1568 AAGAGCGTCACTGAAGAAAGCAAGTACATGGAACCTTCAAGAAATTTTGTCTAAAGCAT 1627
Qy 1661 TCCACGAGGCAAGGAGGAGAAATGACAGGTCGGGCTCTCGTCTGTCGTCATCGACAT 1720
Db 1628 TCACGAGGATTAAGAGAAATTTGCTAAGACTAATGCTCTCATCTTCTTCTCTCATAT 1687
Qy 1721 CGATCGGGG 1729
Db 1688 CTAAGGGAG 1696

RESULT 3
US-10-328-675A-1
; Sequence 1, Application US/10328675A
; Publication No. US2003015917A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDI
; CURRENT APPLICATION NUMBER: US/10/328,675A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1767
; TYPE: DNA
; ORGANISM: Nicotiana tabacum
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1764)
; OTHER INFORMATION: Full length tobacco cDNA sequence
US-10-328-675A-1
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Query Match

27.6%; Score 563.4; DB 12; Length 1767;

QY 356 AGGAGTGGAGTGGGTCAGAGGCGCTGCGGCTGGTGTGACTACCTCTACAGCGCC 415
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QY 580 AAGAGCATGAGGTGAGCTATGATGCTGAATGAGTGTATGGCTATTGTTATAGTGTGA 639
Db |||||
QY 416 GCGTCGGCGACCTGCGCCAGGCGGCTGCTCTGCTGCGAGGAGCTGCGCCACGTCG 475
Db |||||
QY 640 AAGTTAGGCTTACCTAAGATGCTGTTGTTGTTGAGACATGACTGCTCTCATGTTGG 699
Db |||||
QY 476 GGTGCCACCCGCGCTCGGTTCTATGCGCGAGGCTCTCTTGGCGCCCTCCACCTTCCAGG 535
Db |||||
QY 700 CTTGTAGGCCAGCTGTGGCAATTCCTGTTGAGGTTTGTACACATCAITTAACCTTTCAGA 759
Db |||||
QY 536 TCGCGAGCTCACCAACCTCTTCCAGCGGCTCTCTTGTATGCTCTTGTATGAGTTGAAG 595
Db |||||
QY 760 TCTCTGAATGGTTGACAAGTTTTCAGAGACACCTACTGGATATTCTTGACAAAACCTGCAG 819
Db |||||
QY 596 TAGATAACCTTCTATTGATCTTATCTGTTGCCAATGATGCAACAAATCTTGCATGAAC 655
Db |||||
QY 820 CAGAGGATGTAATGATGGTTTATCTGTTGCAACATTTTGGTGAAGATGCGAGAGAT 879
Db |||||
QY 656 TGCTGAAGATGCTTGTATGTTAGTCCGCTCAACCTTTGACATGATTACTCTTGAGA 715
Db |||||
QY 880 TGCTTTCAAGCTGCATTCAGATTAATGTCAGTCTAATGTTGATATCATACCTTTGATA 939
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QY 716 AGTCATTGCTCCAGATGTTATCAAGCAGATTTATGATGCGCCTTAAGCCTCGGATTA 775
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QY 940 AAGCCTTGCCTCATGACATTTGAAACAAATTTACTGATTTCAGCGGAACTTGTCTAC 999
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QY 776 TTTCAACAGAAAACAGGGATTTCTTAACAACATGTGAGGAGGATACACAGAGCCCTTG 835
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QY 1000 AAGGCTTGAAGAACCGGTTTCTGTAACATGTTAAGAGGATACATAGGCAATGG 1059
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QY 836 ACTCTGACGATGTAGAGCTAGTCAAGATGCTGCTCACTGAAGGACAGACAAATCTTGATG 895
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QY 1060 ATTCTGATGTTGTAATTTACTACAAATGTTGCTAAGAGGGGCTACTACCTAGATG 1119
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QY 896 ATGCGTTTGCACTGCACTACCGCTGCAACATTTGATGACTCCAAATTAACACCGAGCTTT 955
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QY 1120 ATGCATATGCTCTCCATTTATGCTGAGGCTATTGCGATGCAAGACTACAGCAGAACTTC 1179
Db |||||
QY 956 TGGATCTCGCACTTGCAGATGTTAATCATAGAACCCAGAGGTTATCTGTTCTTACA 1015
Db |||||
QY 1180 TAGATCTTGCCTGCTGATTTAATCATCAAAATTTCAAGGGGATACAGGCTGTCATG 1239
Db |||||
QY 1016 TTGTCGAGGCGAAGAGAGCTTAAATCATTTGCTCCCTTTTAAACCAAGGGGCTCGAC 1075
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QY 1240 TTGCAGCCATGAGGAAAGAGCTTAAATTTGATGCTCCCTTTTAAACCAAGAGGCTAGAC 1299
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QY 1076 CAGCAGATGTTACATTCGATGGAGAAAGCGGTTTCAAAATCTCAAAAAGACTAACAAC 1135
Db |||||
QY 1300 CTTCTGATCTGACATCCGATGGAAGAAAGCACTTCAAAATGCCCAAGAGGCTCACTAGGC 1359
Db |||||
QY 1136 AAGGGATTTACTTTGGGTTTACCGAAGAGGAAACCTTCTCCAAAGATAGGTTATGTA 1195
Db |||||
QY 1360 TTGTGGATTTCAATGATCTCGGAGGAGGAAATCTGCTTGAATGATCGGTTATGCA 1419
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QY 1196 TTGAATACTGGAGCAAGCTGAAAGAGGGGACCCCAAACTCGGAGAACATCAGTTTCTC 1255
Db |||||
QY 1420 TTGAGATTTCTGGACCAACAGAAAGAGAGACCCTCTGCTAGGAGAGCTTCTGTATCTC 1479
Db |||||
QY 1256 TTGCATGGCAGGTGAGAGTCTTACGAGGAGGTTGCTGTATCTTTGAAACCGAGTTGCTT 1315
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QY 1480 TTGCTATGGCAGGCGATGATTTGCGTATGAAGCTGTTATACCTTGAAATAGAGTTGGCC 1539
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QY 1316 TGGCAAGGATTTATTTCCGATGGAGGCAAGTAGCATGATGATTTCTCAAGTGGATG 1375
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QY 1540 TGGCTAAACTCTTTTCCAAATGGAAGCTAAAGTTGCAATGGACATTTCTCAAGTTGATG 1599
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QY 1376 GAACTTTGGAATTTAACTCTGGTCTGCTGCAAAATCCACCTCTGAAAGACAAACGACAA 1435
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QY 1600 GCACTTCTGAGTTCCCACTGCTAGCTAGCTCGGCAAAAGATGCTTAATCCACAGAGGACAA 1659
Db |||||

QY 1436 CTGTTGATCTAAATGAAGTCTCTTTCATATGAAGAAGAACACATTAGCTGGATGACAG 1495
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QY 1660 CAGTAGATTTTGAACGAGGCTCTCTTTCAGATAAAGAGGAGCAGCTTGAATCGGCTTAGAG 1719
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QY 1496 CACTCTCCAAACAGTGGAGCTCGGAAACGCTTTTCCCGGATGTTTCGAACGTCGTCG 1555
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QY 1556 ACAAGATCATGGATGATGA-----AACTGATCGGTTTCCCTCGGAAAGACACGTCG 1609
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QY 1780 ATAAGATCATGGATGCTGATGACTTGTCTGAGATAGCTTACATGGGAATGATACGGCAG 1839
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QY 1610 CGGA-----GAAGAGGAAGAGGTTTTCATGACCTGACGATGTTTTCAGAAAGGAT 1660
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QY 1840 AAGAGCGCTCACTGAAGAGCAAAAGGTACATGGAACCTTCAAGAAATTTCTGACTAAAGCAT 1899
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QY 1661 TCCACGAGGACAAAGGAGGAGATGACAGGTCGGGGCTCTCGTCGTCGTCGTCATC 1715
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QY 1900 TCACTGAGGATAAAGAGAAATATGATAGACTAAACATCTCTCTCATCTTCTTCTTC 1954
Db |||||

RESULT 5

US-09-908-323-13
; Sequence 13 Application US/09908323
; Patent No. US20020073447A1
; GENERAL INFORMATION:
; APPLICANT: Dong et al.
; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/908.323
; FILING DATE: 17-Jul-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/908.884
; FILING DATE: <Unknown>
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2172 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-09-908-323-13

Query Match 27.6%; Score 563.4; DB 9; Length 2172;
Best Local Similarity 64.3%; Pred. No. 5.4e-120;
Matches 884; Conservative 0; Mismatches 476; Indels 15; Gaps 2;


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Db 546 TTGCGTTTATAGTTATTTGTTATAGTGGCAAGTTAGGAAATTTGCTAGAGAAATTTGTG 605
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Db 606 TTTGTTGTTGATGAGGATGCTCTCATGAAGCTTGTGCTGCTGTTGATTTTGTGTTG 665
Qy 506 AGGTCCTCTTCCGCCCTCCACTTCCAGTCCGAGCTCACCAACTTCCAGCGGC 565
Db 666 AGGTTCTCTATTGTTCTCACAAATTCGAGATTGTGAAATGGTTTCGTTTATCAGAGC 725
Qy 566 GTCTCTTGATGTCCTTGATAGGTTGAAGTAGATAAACCCTTCTATTGATCTTATCTGTTG 625
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Qy 626 CCAACTTATGCAACAAATCTTGTCATGAACTGCTTTGAAAGATGCTTGTATGTTAGTCC 685
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Qy 686 GGTCAAACTTGCATGATTACTCTTGAGAGTCAATGCTCCAGATGTTATCAAGCAGA 745
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Qy 806 AACATGTGAGGAGGTATACACAGAGCCCTTGACTCTGACGATGTAGAGCTAGTCAGGATGC 865
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Qy 986 GAAACCCAGAGGTTTATCTGTTTCTTCACTGCTGCGAGGCGAAGAGAGCTTAAATCA 1045
Db 1146 GAAATCTAAGGGTCACTGTGTACATGTGGCAGCCATGAGAAAGAGCCTAAGATAA 1205
Qy 1046 TTGTCTCCCTTTTAAACGAGGGCTCGACAGCAGATGTTACATTCGATGGGAGAAAG 1105
Db 1206 TTGTATCTTGTTRACCAAGGAGCCCATCCGCTCTGTATATAACATCAGATGATAAAAAG 1265
Qy 1106 CGGTTCAATCTCAAAAGACTTAACAAACAGGGGNTTACTTTGGGCTTACCGAAGAG 1165
Db 1266 CACTGCAGATAGCAAGAGACTTAACAAAGCTGTGGACTTCTATAAACTACAGAACAG 1325
Qy 1166 GAAACCTTCTCAAAAGATAGGTTATGTTATTTGAAATACTGAGCAAGCTGAAAGAGGG 1225
Db 1326 GAAAGATGACCAAAAGGATCGTTGTGATGAAATACTGGAGCAAGCTGAAAGAGAG 1385
Qy 1226 ACCCAAACTCGGAGAGCATCAGTTTCTCTTGAATCGGAGGTGAGAGTCTACAGAGAA 1285
Db 1386 AACCATCTAGGAGAGGTTCTGTTTCTCTTGAAGGAGGAGATGATCTGCGTATGA 1445
Qy 1286 GGTGCTCTATCTGAAACCGAGTTGCTTTGGCAAGGATTTATGTTCCGATGGAGCAA 1345
Db 1446 AGCTATTATATCTTGAATAATAGATTGACATGCTGCTGCTGCTTCCAATGGAAGCGA 1505
Qy 1346 GAGTAGCAATGGATATTGCTCAAGTGGATGAACTTTTGAATTTAACTCGGTTCTGCTG 1405
Db 1506 AAGTGGCTATGATATTCTCAAGTGGAGGAACTTCTGAAATTCACATTGT----- 1556
Qy 1406 CAATCCACCTCTGAAAGACAAACGAGCAACCTGTTGATCTAAATGAAAGTCTTTTCAATA 1465
Db 1557 CAAAGAAATATAGCTGATGACGAGAAATCGGTTGGAATTTGAATGAGGCTCCCTTTATAT 1616
Qy 1466 TGAAGAGAGACACTTACTCGGATGACAGCACTCTCCAAACAGTGAGCTCGGGAAC 1525
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Db 1617 TGAAGAGGAGCACTTTTCAGAGGATGAAGCACTGTCTAAACTGTTGAGCTTGCACAGC 1676
Qy 1526 GCTTTTCCCGCATGTTTCGAACTGTCGACGAAGATCATG-----GATGATGAACATG 1579
Db 1677 GTTTCTTTCACGCTGCTCCGATGTTCTTAATAAGATTATGGACGCCGGAAGATCTATCAC 1736
Qy 1580 ATCCGTTTCCCTCGGAGAGACACGTCGCGGA-----GAGAGGAGAGGTTTC 1630
Db 1737 AGCTTGCATTTTATAGGAAAGATATCTCCAGAGGAACGGCAAGGAAGAAACCATACC 1796
Qy 1631 ATGACCTGCAGGATGTTCTTCAGAAAGCATTTCCAGGAGCAAGAGGAGGAATGACAGGT 1690
Db 1797 TTGAACTGCAAGACGTTTAACTAAGGCTTTTACAGAGACAAAGAGAGTTTGACCGTT 1856
Qy 1691 CGGGGCTCTCCTGCTGCTGTCATCGACATCGATCGGG 1728
Db 1857 CTACATTATCATCATCGTCTGTCGACTCCAATGGGG 1894
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RESULT 7

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US-08-908-884-2
; Sequence 2, Application US/08908884
; Publication No. US20020138872A1
; GENERAL INFORMATION:
; APPLICANT: Dong et al.
; TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF
; NUMBER OF SEQUENCES: 28
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/908,884
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/023,851
; FILING DATE: August 9, 1996
; APPLICATION NUMBER: 60/035,166
; FILING DATE: January 10, 1997
; APPLICATION NUMBER: 60/046,769
; FILING DATE: May 16, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/339004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2104 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: Coding Sequence
; LOCATION: 93...1871
; OTHER INFORMATION:
US-08-908-884-2
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Query Match 20.7%; Score 422.2; DB 8; Length 2104;
Best Local Similarity 58.4%; Pred. No. 2.2e-87;
Matches 824; Conservative 0; Mismatches 556; Indels 30; Gaps 4;
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QY 352 GCGGAGAGGTGGAGGTGGGTAAGAGCGGTGGGCTGGCTCGACTACCTCTACAGC 411
Db 444 GCCAAGGATTAACGAAGTCCGGTTTCGATTCGGTGTGACTGTTTGGCTTATGTTTACAGC 503
QY 412 GCGCGGTGGGAGCTCCCAAGCGCGTGCCTTCGCTCGAGAGAGACTGCGCCAC 471
Db 504 AGCAGAGTGAAGCCGCCCTTAAGAGGTCTGATCGGAGAGAGAGAAATGTCGCCAC 563
QY 472 GTGCGGTGCCACCCCGCGTTCGCTTCATGCGCAGGTCTCTTCGCGCGCTCCACCTTC 531
Db 564 GTGCGTTCGCGCGCGGTGGAATTCATGTTGAGAGGTCTCTATTTGGCTTTCATCTTC 623
QY 532 CAGTTCGCGAGCTCACCACTCTTCAGCGGGGTCTCTGATGCTCTCTGATAGGT 591
Db 624 AAGATCCCTGAATTAATTAATCTCTATCAGAGGCACTTATTGGAGCTTTGAGACAAAGTT 683
QY 592 GAAGTAGATAACCTTCTATTCATCTTCTGTCCTTATGCACTTATGCAAACTTTGCAATG 651
Db 684 GTTATAGAGGACATTTGTTTACTCAAGCTTCTATATATGTTGGTAAAGCTTGTATG 743
QY 652 AAATCTGTTGAAGATGCTTGTATGTTAGTTCGGTCAAACTTTGACATGATCTCT 711
Db 744 AAGCTATTGGATAGATGAAGAGATTATTTGCAAGTCTAATGTAGATGTTAGTCTT 803
QY 712 GAGAAGTCAATTCCTCCAGATGTTATCAAGCAGATTTATGACGCTTAAGCTCGGA 771
Db 804 GAAAGTCAATTTGCCGGAAGAGCTTTTAAAGAGATTAATGTAGACGTAAAGAGCTTGGT 863
QY 772 TTAATTTCCACAGAAACCAAGGATTTCTTCAAAACATGTGAGGAGATACACAGAGCC 831
Db 864 TTGAGGTACCTAAAGTAAG-----AAACATGCTCGAATGTACATAAGCA 911
QY 832 CTGACTCTGAGATGTAGAGTACTCAGGATGCTGCTCCTCTGAAAGGAGACACAAATCTT 891
Db 912 CTGACTCGGATGATTTAGTGTAGTCAAGTTGCTTTTGAAGAGGATCACACCAATCTA 971
QY 892 GATGATGTTGCACTGACCTACCGCTGCAAGATTTGTGACTCCAAATTTACACCGAG 951
Db 972 GATGATGCTGTGCTCTTCAATTCGCTGTGCAATTTGCAATGTGAAGACCGCAACAGAT 1031
QY 952 CTTTGGGATCTCGACTTCAGATGTTAATCATAGAAACCCAAAGGTTTACTCTTCTT 1011
Db 1032 CTTTAAACTGATCTTCCGATGTCAACATAGGAATCCGAGGGATATACGCTGCTT 1091
QY 1012 CACATGCTGCGAGGAGAGAGCTCAAAATCAATGCTCTCTCTTTTAAACAGGGGCT 1071
Db 1092 CATGTTGCTCGATCGGAAGGAGGCAAAATGATCTATCTCTATTGGAAGGAGTGA 1151
QY 1072 CGACAGCAGATGTTACATTCGATGGAGAAAGCGTTCAATCTCAAAAGACTAACA 1131
Db 1152 AGTGATCAGAAAGCACTTTGGAAGGTAGAACCGCACTCATGATCGCAAAACAGCCACT 1211
QY 1132 AAAAAGGGGATTTACTTTGGGTTTACCAGAAAGGAAACCTTCTCCAAAGATAGGTTA 1191
Db 1212 ATGGCGTTGATGTAATAATATCCGGAGCAATGCAAGCACTCTCTCAAGGCGGACTA 1271
QY 1192 TGTATTGAAATCTGGAGCAAGCTGAAAGAGGAGCCCAAACTCGGAGAGCATCAGTT 1251
Db 1272 TGTGTAGAAATCTAGAGCAAGAGACAAACGAGAACAAATTCCTAGAGATGTTCTCTCC 1331
QY 1252 TCTCTTGCATGCGCAGGTGAGAGTCTACGAGGAGGTTGCTGATCTTGAAACCGAGTT 1311
Db 1332 TCTTTTGCATGCGCGCGCGATGAAATGAGATGACGCTGCTCGATCTTTGAAATAGAGTT 1391
QY 1312 GCTTTGGCAAGGATTTATTTCCGATGGAGGCAAGAGTAGCAATGATTTCTCTCAAGTG 1371
Db 1392 GCATTTGCTCAAGCTTTTCCACGGAAGCACAAGCTGCAATGGAGATGCGCGAAATG 1451
QY 1372 GATGAACTTTGGAAATTTAACTG--GGTTCGTGGAATTCACCTCTCTGAAAGACAA 1428
Db 1452 AAGGGAACTGTGAGTTTCATAGTACTAGCTCGAGCCTGACCTCTCACTGTTAGAG 1511

QY 1429 CGGCAACTGTGTGATTAAGTAAAGTCTTTTCAATTAAGAAAGAACACTTAGCTCGG 1488
Db 1512 AGAATCATACCGGTGTAAGATAGACCTTTTCAATCTAGAGAGCATCAAGTAGA 1571
QY 1489 ATGACAGCACTCTCCAAAACAGTGGAGCTCGGAAAACGCTTTTCCGCGGATGTCGAAC 1548
Db 1572 CTAAGAGCGCTTTCTAAGAACCGTGGAACTCGGAAAACGATTTCTTCCGCGCTGTTCCGCA 1631
QY 1549 GTGCTCAGCAAGATCATG-----GATGATGAACACTGATCGGTTTCCCTCGGAGAGAC 1602
Db 1632 GTGCTCAGCAGATTAATGAACCTGTGAGGACTTGAATCACTGCGGTTGCGGAGAGAGAC 1691
QY 1603 ACCTCCGCG-----GAGAAGAGGAAGAGGTTTTCATGACCTGACGAGATGTTCTTCAG 1653
Db 1692 ACTCTAGAAAACGACTTACAAAGAACAAAGGTACATGGAATACAAAGACACTAAAG 1751
QY 1654 AAGCATTTCACGAGGACAAAGGAGGAGAAATGACAGGTGCGGGCTCTGCTGCTGCTGCA 1713
Db 1752 AAGCCTTTTAGTGAGGACAAATTTGGAATTAGAAATTCGCTCCCTGACAGATTCGACTTCT 1811
QY 1714 TCAGATCGATCGGGGCGCATTCGACCAAGG 1743
Db 1812 TCACATCGAAATCAACCGGTGGAAGAGG 1841

RESULT 8

US-09-908-323-2

Sequence 2, Application US/09908323

Patent No. US20020073447A1

GENERAL INFORMATION:

APPLICANT: Dong et al.

TITLE OF INVENTION: ACQUIRED RESISTANCE GENES AND USES THEREOF

NUMBER OF SEQUENCES: 28

CORRESPONDENCE ADDRESS:

ADDRESSEE: Clark & Elbing LLP

STREET: 176 Federal Street

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: Fast-Seq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/908,323

FILING DATE: 17-Jul-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/908,884

FILING DATE: <Unknown>

APPLICATION NUMBER: 60/035,166

FILING DATE: January 10, 1997

APPLICATION NUMBER: 60/046,769

FILING DATE: May 16, 1997

ATTORNEY/AGENT INFORMATION:

NAME: Elbing, Karen L.

REGISTRATION NUMBER: 35,238

REFERENCE/DOCKET NUMBER: 00786/339004

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-428-0200

TELEFAX: 617-428-7045

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 2104 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: cDNA

FEATURE:

NAME/KEY: Coding Sequence

LOCATION: 93...1871

OTHER INFORMATION:
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-908-323-2

Query Match 20.7%; Score 422.2; DB 9; Length 2104;
Best Local Similarity 58.4%; Pred. No. 2.2e-87;
Matches 824; Conservative 0; Mismatches 556; Indels 30; Gaps 4;

QY 352 GCGAGGAGTGGAGGTGGGTACAGGGGCTGCGGCTGCTCGACTACCTCTACAGC 411
DB 444 GCCAAGGATTACGAAGTGGTTCGATTGGTGTGACTGTTTGGCTTATGTTTACAGC 503
QY 412 GCGCGCTGCGGACCTGCCAAGGCGGCTCTCGTGCAGAGGACTGCGCCAC 471
DB 504 AGCAGAGTGAGCCCGCCTTAAGAGATTCTGAATGCGAGAGAGATTGCTGCCAC 563
QY 472 GTGCGGTGCCACCCCGCTGCGGTTTCATGGCGAGGCTCTTCCGCGCTCCACCTTC 531
DB 564 GTGGCTTCCGCGCGGTGGATTTCATGTTGGAGGTTCTCTATTGGCTTTCATCTTC 623
QY 532 CAGTTCGCGAGCTCACCACCTCTTCCAGCGGCTCTCTTGATGTCCTTGATAAGTT 591
DB 624 AAGATCCCTGAATTAATTAATCTCTATCAGAGGCACTTATTGGAGGTTGTAGACAAAGTT 683
QY 592 GAAATAGATAACCTTCTATTGATCTTATCTGTGCGCACTTATGCAACAAATCTTCATG 651
DB 684 GTTATAGAGGACACATGGTTATCTCAAGCTTGTCTAATATATGTTGGTAAAGCTTGTATG 743
QY 652 AAATGCTTGAAGATGCTTGTATGTTGCTGCTGCTCAAGCTTGAATGATGATCTCTT 711
DB 744 AAGCTATTGGATAGATTAAAGAGATTATTGTCAGTCTAATGTAGATATGTTAGTCTT 803
QY 712 GAGAGTCAATGCTCCAGATGTTATCAAGCAGATTATTGATGACGCTTAAGCTCGGA 771
DB 804 GAAAGTCAATGCTCCGAGAGCTTCTTAAAGAGATAATTTGATAGACGTTAAAGAGCTTGGT 863
QY 772 TTAATTTCCAGCAAAACAGGGATTCTTAACAAACATGTCAGGAGGATACACAGACC 831
DB 864 TTGAGGTACCTAAAGTAAAG-----AAACATGCTCGAATGTTACATAAGCA 911
QY 832 CTGACTCTGAGATGATAGCTAGTCTGAGGATGCTGCTCACTGAAGGACAGACAAATCTT 891
DB 912 CTGACTCGGATGATTGAGTTAGTCTGAGTCTGCTTTTGAAGAGGATCAACCAATCTA 971
QY 892 GATGATGCTTGGACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 951
DB 972 GATGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1031
QY 952 CTTTGGATCTGCACTTGCAGATGTTTATCATAGAAACCCAGAGGTTTACTGTTCTT 1011
DB 1032 CTTTAAACCTTGATCTTGGCGATGCTCAACCATAGGATTCGAGGGGATATACGTTGCTT 1091
QY 1012 CACATTGCTGCGAGGAGAGAGCTTAAATCATTTGCTCTCTCTTTTAAACCAAGGGGCT 1071
DB 1092 CATGTTGCTGCGATGCGAAGAGGACCAATGATGATCTCTATTGGAAGAGTGA 1151
QY 1072 CGACAGCAGATGTTTACATTCATGCGGAGAAAGCGGTTTCAAAATCTCAAAAGACTAACA 1131
DB 1152 AGTGATCAGAAAGCAACTTGAAGGTAGAACCGCACTCATGATCGCAAAACAAGCCACT 1211
QY 1132 AAACAGGGGATTTCTTTGGGTTTACCGAAGAGAAACCTTCTTCCAAAGATAGTTA 1191
DB 1212 ATGCGGTTGAATGTAATATATCCCGGAGCAATGCAAGCATTTCTTCAAAAGCGGCACTA 1271
QY 1192 TGATTGAAATCTGAGCAAGCTCAAGAGAGGACCCACCACTCGGAGAGCATCAGTT 1251
DB 1272 TGTGTAGAAATCTAGAGCAAGAGAGCAAAACGAGAACAAATCTTAGAGATGTTCTCTCC 1331
QY 1252 TCTCTGCAATGGCAGGTGAGAGTCTACGAGGAGGTTGCTGTATCTTTGAAAACCGAGTT 1311
DB 1332 TCTTTGAGTGGCGGCGATGAATGAAGATGACGCTGCTCGATCTTTGAAAATAGAGTT 1391
QY 1312 GCTTTGGCAAGATTATGTTCCGATGAGGAGCAAGAGTAGCAATGGATATTGCTCAAGTG 1371

DB 1392 GCACCTGCTCAACGTCTTTTCCAAACGGAAGCAAGCTGCAATGGAGATCGCCAAATG 1451
QY 1372 GATGGAACCTTTGGAAATTTAACTG---GGTCTGTGTGCAAAATCCACCTCTCTGAAAGACAA 1428
DB 1452 AAGGGAACATGTGAGTTTCATAGTAGCTAGCTCGAGCTGACCGCTCTCTCCTGTTACGAAG 1511
QY 1429 CGGCAACCTGTTGATCTTAAATGAAAGTCTTTTATATGAAAGAGAAACACTTAGCTCGG 1488
DB 1512 AGAATCATCACCGGTTGAAAGATAGCACTTTTCAGAAATCTTGAAGAGCATCAAAAGTAGA 1571
QY 1489 ATGACAGCACTCTCCAAACAGTGGAGCTCGGGAACGCTTTTCCCGGATGTTGGAAC 1548
DB 1572 CTAAGAGCGCTTCTTAAACCCGTGGAACCTCGGGAACGATTTCTTCCCGCTGTTCCGCA 1631
QY 1549 GTGCTCGCAACAGATCATG-----GATGATGAAACTGATCGGTTTCTCTCGGAAGAGAC 1602
DB 1632 GTGCTCGACAGATTATGAACTGTGAGGACTTGACTCACTGCTTGGGAGAGACGAC 1691
QY 1603 ACCTCGCGG-----GAGAAGAGGAAAGGTTTTCATGACCTGACGAGATGTTCTTCAAG 1653
DB 1692 ACTGCTGAGAAACGACTACAAAGAGCAAAAGGTACATGGAATACAAAGAGACACTAAAG 1751
QY 1654 AAGCATTCCACGAGGAGGAGGAGATGACAGGTCGGGGCTCTCGTCTGCTCGCTCA 1713
DB 1752 AAGCCTTTAGTGAGGACAAATTTGGAATTAGGAATTCCTCCCTGACAGATTCGACTTCT 1811
QY 1714 TCAGCATCGATCGGGGCCATTTCGACCAAGG 1743
DB 1812 TCCACATCGAATCAACCGGTGGAAGAGG 1841

RESULT 9

US-09-934-455-73
; Sequence 73, Application US/09934455
; Publication No. US20030121070A1
; GENERAL INFORMATION:
; APPLICANT: Adam, Luc
; APPLICANT: Creelman, Robert
; APPLICANT: Dubell, Arnold
; APPLICANT: Heard, Jacqueline
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Keddle, James
; APPLICANT: Pilgrim, Marsha
; APPLICANT: Ratcliffe, Oliver
; APPLICANT: Reuber, Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Pineda, Omaira
; TITLE OF INVENTION: Genes for Modifying Plant Traits IV
; FILE REFERENCE: MBI-0025
; CURRENT APPLICATION NUMBER: US/09/934,455
; CURRENT FILING DATE: 2001-08-22
; PRIOR APPLICATION NUMBER: 60/227439
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: MBI-0022
; PRIOR FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: MBI-0023
; PRIOR FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 516
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 73
; LENGTH: 2104
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (93)..(1874)
; OTHER INFORMATION: G278
US-09-934-455-73

Query Match 20.7%; Score 422.2; DB 11; Length 2104;
Best Local Similarity 58.4%; Pred. No. 2.2e-87;

Matches	824;	Conservative	0;	Mismatches	556;	Indels	30;	Gaps	4;
Qy	352	GGCAGAGAGTGAGAGTCGGGTACGAGGCGCTCGCGTGGTGTGCTCGACTACCTCTACAGC	411						
Db	444	GCCAAAGGATTACGAAGTCGGTTTCGATTCCGTTGTGACTGTTTTGGCTTATGTTTACAGC	503						
Qy	412	GGCCGGTTCGGGACCTGCCCAAAGGCGCGTGCCTCTGCGTCGACGAGACTCGGCCAC	471						
Db	504	AGCAGAGTGAGACCGCGCCCTAAAGGAGTTTCTGAATGGCAGACGAGAAATTCCTGCCAC	563						
Qy	472	GTCCGGTGCCACCCCGCGTCGGTTTCATGGCGCAGGTCTCTTTCGCCGCTCCACCTTC	531						
Db	564	GTGCTTTCGGCGCGCGGTGGAAATTCAGTTGGAGTTCCTATTGGCTTTTCATCTTC	623						
Qy	532	CAGTCCCGAGCTCACCAACTCTCCACGCGCTCTCCTTGATGCTCTTGATAAGTT	591						
Db	624	AGATCCTCGAATTAATTACTCTATCAGAGGCACTTATTGACGTTGTAGACAAGTT	683						
Qy	592	GAAGTAGATAACCTTCTATTGATCTTAATCTGTTGCCAACTTATGCAACAAATCTTCATG	651						
Db	684	GTTATAGAGCACATTGGTTTATCTCAAGCTTGTAAATATATGTTGTAAGCTTGTATG	743						
Qy	652	AAACTGCTTGAAGATGCTTGTATATGGTAGTCGGTCAAACTTGACATGATTACTCTT	711						
Db	744	AAGCTATTGGATAGATTAAGAGATTAATTGTCAAGTCTAATGTAGATATGGTTAGTCTT	803						
Qy	712	GAGAAGTCATTTCCTCCAGATGTTTATCAACAGATTAATTGATGACGCGCTTAAGCCTCGGA	771						
Db	804	GAAAGTCATTGCCGAAGAGCTTTTAAAGAGATAATTGATAGACGTAAGAGCTTGGT	863						
Qy	772	TTAATTTTACCAGAAAAACAAGGATTTCTTAACAACATGTGAGGAGGATACACAGGCC	831						
Db	864	TTGGAGTACCTAAAGTAAAG-----AAACATGCTCGAATGTACATAAGGCA	911						
Qy	832	CTTGACTCTGACGATGTAGAGCTAGTCAGAGATGCTGCTCACTGAAGACAGACAAATCTT	891						
Db	912	CTTGACTTCGGATGATATTGATTTAGTTAGTCAAGTTGCTTTTGAAGAGGATCACACCAATCTA	971						
Qy	892	GATGATCGGTTTGACATGCACCTACGCGTCGAACTTGACATTCACCAAAATTACAAACCGAG	951						
Db	972	GATGATCGGTGCTCTTCAATTTTCGCTGTTGCAATTTGCAATGTGAAGCCGCAACAGAT	1031						
Qy	952	CTTTTGGATCTCGCACTTCGAGATGTTTAATCATAGAAACCCAGAGGTTATACGTTCCTT	1011						
Db	1032	CTTTTAAAACCTTGATCTTCCGATGTCAACCATAGGAATCCGAGGGGATATACGGTGCTT	1091						
Qy	1012	CACATTCGTCGGAGCGGAAGAGACCTTAAATCATTTGCTCCCTTTTAAACCAAGGGGCT	1071						
Db	1092	CATGTTGCTGCGATTCGCGAAGGAGCCAAATTTGATACTATCTCTATTGGAAAAAGGTGCA	1151						
Qy	1072	CGACCACGAGATGTTACATTCGATGGGAGAAAAAGCGGTTCAAAATCTCAAAAAGACTAAACA	1131						
Db	1152	AGTGCAATCAGAAGCAACTTTGGAAAGGTAGAACCGCACTCATGATCGCAAAACGAGCCACT	1211						
Qy	1132	AAAACAAGGGATTACTTTGGGGTTTACCGAAGAAGGAAAAACCTTCTCCAAAAGATAGGTTA	1191						
Db	1212	ATGCGGTTTGAATGTAATAATATCCCGAGCAATGCAAGCATTTCTCTCAAGGCCGACTA	1271						
Qy	1192	TGTAATGAAATPACTGGAGCAAGCTGAAAGAGGAGCCCAACAACTCGGAGAGCATCAAGTT	1251						
Db	1272	TGTGTAGAAATPACTAGAGCAAGAAGACAAACAGAACAAATTTCTAGAGATGTTTCTCTCC	1331						
Qy	1252	TCTCTTCCAAATGGCAGGTGAGGCTACGAGGAGGTTGCTGTATCTTTGAAAAACCGAGTT	1311						
Db	1332	TCATTTGCAAGTGGCGGCGGATGAAATGAAAGATGACGCTGCTGCAATTTGAAATAGAGTT	1391						
Qy	1312	GCTTTGGCAAGGATTAATGTTTCCGATGGAGGCAAGTAGCAATGGATATTGCTCAAGTG	1371						
Db	1392	GCATTTGCTCAAACGCTTTTCCAAAGGAGCAACGCTGCAATGGAGATCGCGGAATG	1451						
Qy	1372	GATGGAACCTTTGGAAATTTAAACCTG---GGTTCTGGTGAATCAATCCACTCTCTGAAAGCAA	1428						
Db	1452	AAGGGAACATGTGAGTTTCATAGTCACTAGCTCGAGCTGACCGCTCTCACTGGTACGAAG	1511						

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RESULT 10
US-10-225-068-241
; Sequence 241, Application US/10225068
; Publication No. US20030217383A1
; GENERAL INFORMATION:
; APPLICANT: Mendel Biotechnology, Inc.
; APPLICANT: Reuber, T. Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Heard, Jacqueline E.
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Adam, Luc J.
; APPLICANT: Dubell, Arnold T.
; APPLICANT: Ratcliffe, Oliver
; APPLICANT: Pineda, Omalra
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Broun, Pierre E.
; TITLE OF INVENTION: STRESS-RELATED POLYNUCLEOTIDES AND
; POLYPEPTIDES IN PLANTS
; FILE REFERENCE: 514442002040
; CURRENT APPLICATION NUMBER: US/10/225,068
; CURRENT FILING DATE: 2002-08-09
; PRIOR APPLICATION NUMBER: 60/310,847
; PRIOR FILING DATE: 2001-08-09
; PRIOR APPLICATION NUMBER: 60/336,049
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: 60/338,692
; PRIOR FILING DATE: 2001-12-11
; PRIOR APPLICATION NUMBER: 10/171,468
; PRIOR FILING DATE: 2002-06-14
; NUMBER OF SEQ ID NOS: 246
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 241
; LENGTH: 2104
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (93) ... (1874)
US-10-225-068-241

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	Query Match	20.7%	Score 422.2	DB 12	Length 2104
	Best Local Similarity	59.4%	Pred. No. 2.2e-87		
	Matches 824	Conservative	0	Mismatches 556	Indels 30
	Gaps				4
QY	352	GGCGAGGAGTGGAGTGGGTGCGGCGTGGCGGTGGGTGCTGCGACTACCTACAGC	411		
DP	444	GCTAAGATTTACGAAGTCGGTTTCGATTCGGTTGTGACTGTTTTGGCTTAATGTTACAGC	503		

QY 412 GCGCGCTCGGACCTCCCAAGCGCGGTGCTCTCGGTGCGAGGAGCTGCGCCAC 471
Db |||||
QY 504 AGCAGAGTGAGACCGCCCTAAAGAGGTTTCTGAATGCGCAGAGAGATTGCTGCCAC 563
Db |||||
QY 472 GTGCGGTGCCACCGCGCTGCGTTTCATGGCGAGGTCCTCTTCCGCGCCTCCACCTTC 531
Db |||||
QY 564 GTGGCTTCCGCGCGCGTGTGATTTCATGTTGGAGGTTCTCTATTTGGCTTTTCATCTC 623
Db |||||
QY 532 CAGTCCGCGAGCTCACCACCTCTTCCAGCGCGCTCTCTTGTATGTCCTTGTATAAGGTT 591
Db |||||
QY 624 AAGATCCCTGAATTAATTACTCTCTATCAGAGGCACTTATTGGAGGTTGTAGACAAAGTT 683
Db |||||
QY 592 GAAGTAGATACCTTCTATTGATCTTATGTTGCGCAACTTATGCAACAAATCTTGGCATG 651
Db |||||
QY 694 GTTATAGAGGACACATGCTTATCTCAAGCTTGTCTAATATATGTTGGTAAAGCTTGTATG 743
Db |||||
QY 652 AAATCTGTTGAAAGATGCTTGTATGTTAGTTCGCGTCAAACTTGTGACATGATTACTCTT 711
Db |||||
QY 744 AAGCTATTGGATAGATGTAAGAGATTAATTGTCAAGTCTAATGTAGATATGTTAGTCTT 803
Db |||||
QY 712 GAGAGTCAATTCCTCCAGATGTTATCAAGCAGATTTATGTGCAAGCTTAAGCCTCGGA 771
Db |||||
QY 804 GAAAGTCAATTCGCGGAAGAGCTTGTAAAGAGATAATTGATAGAGTTAAAGAGCTTGT 863
Db |||||
QY 772 TTAATTTCCAGAAAACAGAGATTTCTTAACAAATGTGAGAGGATACACAGGCC 831
Db |||||
QY 864 TTGGAGGTACCTAAAGTAAG-----AAACATGTCTCGAATGTACATAAGGCA 911
Db |||||
QY 832 CTGACTCTGAGATGATAGCTAGTCAAGATGCTGCTCACTGAGGAGACACAAATCTT 891
Db |||||
QY 912 CTGACTCGGATGATATTGAGTTAGTCAAGTTGCTTTTGAAGAGGATACACCAACTTA 971
Db |||||
QY 892 GATGATCGTTTGCACTGACCTACGCCGTGCAACATTTGTGATCTCAAAATTTACAAACGAG 951
Db |||||
QY 972 GATGATCGTTGCTCTTCAATTCGCTGTGCATATTGCAATGTGAACCGCAACAGAT 1031
Db |||||
QY 952 CTTTGGATCTGCACTTGCAGATGTTAATCATAGAAACCAAGAGTTTACTGTTCTT 1011
Db |||||
QY 1032 CTTTAAACATGATCTTTCGCGATGTCACCATAGGAATCCGAGGGATATACGTTGCTT 1091
Db |||||
QY 1012 CACATGCTGCGAGCGAAGAGAGCTAAATCATTTGCTCCCTTTTAAACAGGGGCT 1071
Db |||||
QY 1092 CATGTTGCTGGATGCGGAAGAGAGCCAAATTTGATATCTCTATTGGAATAAGGTGCA 1151
Db |||||
QY 1072 CGACAGCAGATGTTACATTCGATGGGAGAAAAGCGGTTCAAACTCTCAAAAGACTAACA 1131
Db |||||
QY 1152 AGTGATCAGAAGCAACTTTGGAAGGTAGAACCGCACTCATGATCGCAAAACAGCCACT 1211
Db |||||
QY 1132 AAACAGGGGATTTACTTTGGGTTTACCAGAAAGGAAAACCTTCTCCAAAAGATAGGTTA 1191
Db |||||
QY 1212 ATGCGGTTGAATGTAATATATCCGGAGCAATGCAAGCATTTCTCTCAAGGGCGACTA 1271
Db |||||
QY 1192 TGTATTGAATTAAGTCTGAGCAAGTGAAGAGGACCCCAACTCGGAGAGCATCAGTT 1251
Db |||||
QY 1272 TGTGTAGAAATACTAGAGCAAGAGACAAACGAGAAACAAATTTCTCTAGAGATGTTCTCC 1331
Db |||||
QY 1252 TCTCTGCAATGCGAGGTGAGAGTCTACGAGAGGTTGCTGTATCTTTGAAAACCGAGTT 1311
Db |||||
QY 1332 TCTTTGCAATGCGCGCGATGAATTGAAGATGACGCTGCTCGATCTTTGAAAATAGAGTT 1391
Db |||||
QY 1312 GCTTTGCAAGGATTAATGTTCCGATGGAGCAAGATAGCAATGGATTTGCTCAAGTG 1371
Db |||||
QY 1392 GCACCTTGCTCAACGCTCTTTTCCAAGGAGCAACAGCTGCAATGGAGATCGCCGAATG 1451
Db |||||
QY 1372 GATGCACTTTGGAATTTAACTG---GGTCTGTTGCAATCCACCTCTCTGAAAGACAA 1428
Db |||||
QY 1452 AAGGAAATGATGAGTTTCAATGACTAGCTCGAGCCTGACCGTCTCACTGATCAGAG 1511
Db |||||
QY 1429 CGGCAACTGTTGATCTAAATGAAAGTCTCTTTTCAATTAATGAAGAGAACACTTACTCGG 1488
Db |||||
QY 1512 AGAATATCACCGGTTGTAAGATAGCACCTTTTCAATCTTCAAGATCTTAGAAGAGCATCAAGTAGA 1571
Db |||||

QY 1489 ATGACAGCACTCTCCAAAACAGTGGAGCTCGGAAAACGCTTTTCCCGCGATGTTTCGAAC 1548
Db |||||
QY 1572 CTAAGAGCGCTTTCTAAACCGTGGAACTCGGAAACGATTTCTTCCCGCGTGTTCGGCA 1631
Db |||||
QY 1549 GTGCTCGACAAAGATCATG-----GATGATGAAACTGATCGGTTTCCCTCGGAAGAGAC 1602
Db |||||
QY 1632 GTGCTCGACCAAGATTGAACTGTGAGACTTTGACTCACTGCTTGGCTTGGGAGAGACAGAC 1691
Db |||||
QY 1603 ACCTCCGCG-----GAGAAGAGGAAGAGGTTTTCATGACCTCGAGGATGTTTCTTCAG 1653
Db |||||
QY 1692 ACTGCTGAGAAACGACTACAAAAGCAAGCAAGGTACATGGAATAACAGAGACACTAAAG 1751
Db |||||
QY 1654 AAGCATTCACAGGACAGAGAGAGAAATGACAGGTCTCGGGCTCTCGCTCGTCGTCTCA 1713
Db |||||
QY 1752 AAGGCTTTAGTAGAGGCAATTTGGAAATTAGGAAATTCGCTCCCTGCACAGATTTCGACTTCT 1811
Db |||||
QY 1714 TCGACATCGATCGGGGCCATTCGACCAAGG 1743
Db |||||
QY 1812 TCCATCGAATCAACCGGTGGAAGAGG 1841
Db |||||
RESULT 11
US-10-328-675A-5
; Sequence 5, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 308570USNPDI
; CURRENT APPLICATION NUMBER: US/10328, 675A
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 1740
; TYPE: DNA
; ORGANISM: Brassica napus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1737)
; OTHER INFORMATION: Canola cDNA sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (6)..(6)
; OTHER INFORMATION: Xaa is either Gly or Arg
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (19)..(19)
; OTHER INFORMATION: Xaa is either Leu or Pro
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (34)..(34)
; OTHER INFORMATION: Xaa is either Tyr or Phe
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (39)..(39)
; OTHER INFORMATION: Xaa is either Phe or Leu
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (97)..(97)
; OTHER INFORMATION: Xaa is either Ala or Thr
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (151)..(151)
; OTHER INFORMATION: Xaa is either Glu or Asp
; FEATURE:
; NAME/KEY: misc_feature

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; LOCATION: (196)...(196)
; OTHER INFORMATION: Xaa is either Asn or Ile
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (242)...(242)
; OTHER INFORMATION: Xaa is either Asp or Asn
US-10-328-675A-5

Query Match      18.7%; Score 381.8; DB 12; Length 1740;
Best Local Similarity 58.4%; Pred. No. 4.4e-78;
Matches 812; Conservative 3; Mismatches 510; Indels 66; Gaps 6;

QY 351 CGCGAGGAGGTGGAGGTGGGTACGAGCGCTGGCGGTGGTGTCTGCTACTCTCTACAG 410
Db      |||||
QY 345 CGCGGCGAATACGACGCTGGGTTCGATTCGTGTGGCTGTCTCTGCGGTACGTTACAG 404
Db      |||||
QY 411 CGCGCGCTCGCGACCTGCCCAAGCGCGCTCTCGCTCGAGGAGTGGCCCA 470
Db      |||||
QY 405 CGCGAGGTGAGCGCGCTCCGAAGGAGTTTCTGAATGCGGACGAGAGTGTGCA 464
Db      |||||
QY 471 CGTGGGTGCCACCCCGCTCGCTTCATGCGGAGGTCTCTTTCGCGGCTCCACCTT 530
Db      |||||
QY 465 CGTGGGTGCCCTCGCGCTGTGATTTCAATGCGGAGTTCTACTTGGCTTTCGCTT 524
Db      |||||
QY 531 CGAGGTGCGCGAGCTCACCACTCTTCAGCGGCTCTCTTGTATGCTCTTGTATAGGT 590
Db      |||||
QY 525 CCAGATTACGAACTGGTTTACCATTGTATCAGAGGATTTACTGGATGTGTAGACAAAGT 584
Db      |||||
QY 591 TGAAGTGTAGTAACCTTCTATTGATCTTCTGTGCAACTTATGCAACAATCTTGCAT 650
Db      |||||
QY 585 TAWCATAGAAAGACTTTGGTGTCTCAAGCTTGCTACACTCTGGGTAAAGCGTGCA 644
Db      |||||
QY 651 GAAACTGTGAAAGATGCTTGTATGTTAGTTCGCGTCAAACTTGATGATGATCTCT 710
Db      |||||
QY 645 GAAGCTATTTCGTAAGTGCAGAGAGATCATTTGTCAAGTCTAAGTGTGTTACTCT 704
Db      |||||
QY 711 TGAAAGTCAATTCCTCCAGATGTTATCAAGCAGATTATTGATGACCGCTAAGCTCGG 770
Db      |||||
QY 705 AAAGAACTATTTCCTCGTACGATGTTCCCAAGCAAGTAATCGATATCCGCAAGAGCTGG 764
Db      |||||
QY 771 ATTAATTTTACCAAGAAACAAAGGATTTCTTCAACAAATGTGAGGAGTACACAGAGC 830
Db      |||||
QY 765 CTTGAGGTAGCTGAA-----CCAGAAACATGCTCCAAACATACACAGGC 812
Db      |||||
QY 831 CTTGATCTGACGATGTAGAGTGTAGTGTGCTGCTCTGCTGCTGCTGCTGCTGCTGCT 890
Db      |||||
QY 813 GCTTGTAGTCAGAGATCTTGACCTTGTGCTGTATGCTTTTGAAGAGGGCCACAGCAATCT 872
Db      |||||
QY 891 TGATGATGCTTTCGACTGCTACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 950
Db      |||||
QY 873 AGACGAAGCTGTATGCTCTCCATTTGCTGTGCTGTATGCTGTATGCTGTATGCTGTATG 932
Db      |||||
QY 951 GCTTTTGTGATCTGCGACTTGCAGATGTTATATCAAGAAACCCCAAGAGGTTATCTGTTCT 1010
Db      |||||
QY 933 TCTCTTGAAGTCTGGGTTTTCGCGATGCTCAACCGGAGAAACCCGAGAGGTTACACGTAAT 992
Db      |||||
QY 1011 TCACATGCTGCGAGGCGAAGAGAGCTTAAATCATGCTTCTCTTAAACCAAGGGGC 1070
Db      |||||
QY 993 TCACGTGCTGCTGAGGAGAGAGCGACATGATAGCAATGTTGTGACGAAAGGGGC 1052
Db      |||||
QY 1071 TCGACGACGAGATGTTTACATTCGATGGGAGAAAGCGGTTCAATCTCAAAAAGACTAAC 1130
Db      |||||
QY 1053 TAATGCAATTAGAAATGTTTGTGACGGGAGAACTGCTGTGTTGATCGGAAACAACTCAC 1112
Db      |||||
QY 1131 AAAACAAGGGATTTACTTGGGTTACCGAAGAGGAAACCTTCTCCAAAAGATAGGTT 1190
Db      |||||
QY 1113 TA---AGCGGCGGAGTGTGTTATCTGAGAAAGGAAAGTGTAGTGTGCAAGGCGGAGT 1169
Db      |||||
QY 1191 ATGATTTGAATATCTGAGCAAGCTGAAAGAA---GGGACCCCAACCTCGGAGAGCATC 1247
Db      |||||
QY 1170 ATGTTGATAGATATCTCAAGCAACACAGACACACACAGGAAACCTTCTGAAAGATGTTTC 1229
Db      |||||
QY 1248 AGTTTCTCTTGCATGCGAGGTGAGAGTCTACAGGAGAGGTTGCTGTATCTTGAAACCG 1307
Db      |||||

; LOCATION: (196)...(196)
; OTHER INFORMATION: Xaa is either Asn or Ile
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (242)...(242)
; OTHER INFORMATION: Xaa is either Asp or Asn
US-10-328-675A-19

Query Match      18.6%; Score 380.4; DB 12; Length 1803;
Best Local Similarity 57.4%; Pred. No. 9.4e-78;
Matches 778; Conservative 0; Mismatches 551; Indels 27; Gaps 4;

QY 351 CGCGAGGAGGTGGAGGTGGGTACGAGCGCTGGCGGTGGTGTCTGCTACTCTACAG 410
Db      |||||
QY 348 CGCCAGAGATTACGAAGTGGCTTTGACTCGGCTTGTGGCGGTTTGGCGGTATGTTTACAG 407
Db      |||||
QY 411 CGCGCGCTGCGGCGACCTGCCCAAGCGCGTCTCTGCTGCGAGGAGTGGCGCCA 470
Db      |||||

RESULT 12
US-10-328-675A-19
; Sequence 19' Application US/10328675A
; Publication No. US2003015917A1
; GENERAL INFORMATION:
; APPLICANT: Salmemon, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDIV1
; CURRENT APPLICATION NUMBER: US/10/328,675A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 19
; LENGTH: 1803
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1803)
; OTHER INFORMATION: AtNMLC4-2 genomic sequence
US-10-328-675A-19

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Db 408 CGCAGAGTGAGTCCCGCCGAGGAGCTTCTGCTTGGGTAGACGAGTATGTTGCCA 467
Qy 471 CGTGGGTGCCACCCCGCGTGGGTTTCATGGCGAGGTCTCTTTCGCGCGCTCCACCTT 530
Db 468 CGTGGCTTGGCGGTCAAAAGGTGGATTTCATGGTGGAGGTCTTTATCTGCTTCTGGTTT 527
Qy 531 CCAGGTGCCGAGCTCACCACCTCTCCAGGGGCTCTCTTGTATGCTTGTGATAAGGT 590
Db 528 CCAGATTCAAGAAATTTAGTTACTCTGTATGAGAGGCGATTCTTGGAAATGTAGACAAAGT 587
Qy 591 TGAAGTAGATAACCTTCTATTGATCTTATGTTGCCAACTTATGCAACAAATCTTGAT 650
Db 588 TGTAGTCAGACATCTTGGTTATATTCAAGCTTGATCTATGTTGTACAAATACAA 647
Qy 651 GAAACTGCTTGAAGATCCCTTGATGATGATGTCGGGTCAACCTTGACATGATTACTCT 710
Db 648 GAAGCTTTGGATAGATGCATAGAAATTTATCGTGAAGTCTGATATAGAACTAGTTAGTCT 707
Qy 711 TGAGAGTCATGCTCCAGATGTTATCAAGCAGATTTATGATGACGCCCTTAAGCTCGG 770
Db 708 TGAGAGTCTTTACCTCAACATTTTCAAGCAATTCATAGACATFCCGCGAAGCGCTCTG 767
Qy 771 ATTAATTTCCACAGAAACAGAGGATTTCTTAACAAACATGTGAGGAGTACACAGAGC 830
Db 768 TCTAGAGCCACTTAA-----CTGAAAGGCGATGTCAAGAACATATACAAGGC 815
Qy 831 CTTGACTCTGACGATGTAGAGCTAGTCAGGATGCTGCTCACTGAAGGACAGACAAATCT 890
Db 816 GCTAGACTCAGATGTTGAGCTGTCAAGATGCTTTGTAGAGGACACACCAATCT 875
Qy 891 TGATGATCGCTTGGACCTAGCTACGCGGTGAAACATTTGAGCTCCAAAATTAACACGA 950
Db 876 CGATGAGCGTATGCTCTTCTTATTTGCTATCGCTCACTCGCTGTGAAGACCGCGTATGA 935
Qy 951 GCTTTGATCTCGACCTGAGATGTTAATCATAGAACCCAGAGGTTATCTGTTCT 1010
Db 936 TCTCTCGAGCTTGAGCTTGGGATGTTAACTTAGAAATCCGAGGGGATACACTGTCT 995
Qy 1011 TCACATTTCTCGAGGCGAAGAGAGCTTAAATCATTTGCTCCCTTTTAAACCAAGGGGC 1070
Db 996 TCATGTTCTCGGATCGGAGGAGCGGAGTGTATATCTTTGTTAATGAAGGGGC 1055
Qy 1071 TCGACGACAGATGTTACATTCATGAGGAGAAAGCGGTTCAAAATCTCAAAAGACTAAC 1130
Db 1056 AAATATTTTAGACACAACTTGATGTTAGAACCGCTTTAGTGATTTGTAACAGACTCAC 1115
Qy 1131 AAAACAAGGGATTTCTTTGGGTTTACCGAAGAGGAAACCTTCTCCAAAGATAGGTT 1190
Db 1116 TAAAGCGGATGACTACAAAACTAGTACGAGGAGCGGTACGCTTCTCTGAAAGCGGAT 1175
Qy 1191 ATGATTGAAATACCTGAGCAAGCTGAAAGAGGG--ACCCACAATCTCGAGAGGATC 1247
Db 1176 ATGCATAGAGTACTTGAGCATGAACAAACTAGATATTTGTGCGCTATAGAGGCTTC 1235
Qy 1248 AGTTTCTTCCAAATGCGAGGTAGAGTCTACGAGGAAGGTTGCTGTATCTTGAACCG 1307
Db 1236 ACTTCTCTCCAGTAACTCCAGAGGAGTTGAGGATGAGGTGCTCTATTTATGAACCG 1295
Qy 1308 AGTTGCTTTGGCAGGATTTGTTTCCGATGGAGGCAAGATAGCAATGGATATGCTCA 1367
Db 1296 AGTTGCACTTCTCGACTTCTTTTCCAGTGGAAACTGAACTGATACAGGGGTATGGCAA 1355
Qy 1368 AGTGATGGAATTTGGAAATTTA---ACCTGGGTTCTGTGCAAAATCCACCTCTCTGAAAG 1424
Db 1356 ATGGAGAAACATCGGAGTTTACAGCTTCTAGTCTCGAGCTGATCATCATTTGGTGA 1415
Qy 1425 ACAACGGACAACTGTTGATCTAAATGAAAGTCTTTTCAATATGAAGAGAACACTTAGC 1484
Db 1416 AAAGCGGACATCACTAGACCTAAATATGCGCGGTTCCAAATCCCATGAGAGCAATTTGAG 1475
Qy 1485 TCGNATGACAGCACTCTCAAAACAGTGGAGCTCGGGAAACGCTTTTCCCGCGATGTTCT 1544

Db 1476 TAGACTAAGAGCACTTTGTAAACCGTGGAACTCGGGAAACGCTACTTCAACGATGTTCT 1535
Qy 1545 GAACGTGCTCGACAAGATCATGGATGATGAACTGATCCGGTTTCCCTCGGAAGAGACAC 1604
Db 1536 GCTTGATCACCTTTATGGATCTGAGGACTTGAATCATCTCTGCTAGCGTAGAAGAAGATAC 1595
Qy 1605 GTCCGCG-----GAGAGAGAGAGAGGTTTCATGACCTGCGAGGATGTTCTTCAGAA 1655
Db 1596 TCCTGAGAAACGGCTACAAAGAGCAAGGTATACATGGAACCTACAAAGAGACTCTGATGAA 1655
Qy 1656 GGCATTCCACGAGGACAAAGGAGGAGGAATGACAGGTC 1691
Db 1656 GACCTTTAGTGAGGACCAAGGAGGAATGTGGAAAGTC 1691

RESULT 13

US-10-328-675A-71
; Sequence 71, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 308570USNPDIV1
; CURRENT APPLICATION NUMBER: US/10/328,675A
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519,232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219,338
; PRIOR FILING DATE: 1999-03-09
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 71
; LENGTH: 1818
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (13)..(1818)
; OTHER INFORMATION: AtNMLc4-2 cDNA sequence
US-10-328-675A-71

Query Match 18.6%; Score 380.4; DB 12; Length 1818;
Best Local Similarity 57.4%; Pred. No. 9.4e-78;
Matches 778; Conservative 0; Mismatches 551; Indels 27; Gaps 4;

Qy 351 CGGCGAGAGGTGAGGTGCGGTACGAGGCGCTCGGCTGGTCTCGACTACCTCTACAG 410
Db 363 CGCCAGAGATTACGAAGTTCGGCTTTGACTCGGTTGTGGCGTTATGTTTACAG 422
Qy 411 CGGCGGTGCGGACCTGCCCAAGGCGGCTGCTCTGCGTCGACGAGGACTGCGCCA 470
Db 423 CGGCGAGAGTGGTCCCGCCGAGGAGGCTTCTGCTTGGTAGACGAGGATTTGGCA 482
Qy 471 CGTGGGTGCCACCCCGCGCTCGGTTTCATGGCGAGGTCCTCTTCGCGGCTCCACCTT 530
Db 483 CGTGGCTTGGCGGTCAAAAGGTGGATTTCATGGTGGAGGTTCTTTATCTGTTCTTCTGTTT 542
Qy 531 CCAGGTGCGGAGCTACCAACCTCTTCCAGCGGCTCTCTTGTATGCTCTTGTGATAAGGT 590
Db 543 CCAGATTCAAGAAATAGTTACTCTGTATGAGGAGGAGTCTTGGAAATTTAGACAAAGT 602
Qy 591 TGAAGTAGATAACCTTCTATTGATCTTATCTGTTGCCAATCTTATGCAACAAATCTTGAT 650
Db 603 TGTAGTGAAGACATCTTGGTTATATTCAAGCTTGATACTCTATGTGTGACACATACAA 662
Qy 651 GAAACTGCTTGAAGATGCTTGTATGTTAGTCCGGTCAAACTTGAATGATGATTTACTCT 710
Db 663 GAAGCTTTGGATAGATGATAGAAATTTATCGTGAAGTCTGATATAGAACTAGTTAGTCT 722
Qy 711 TGAGAGTTCATGTCCTCCAGATGTTATCAAGCAAGTATTGATGACGCTTAAGCTCTCGG 770

Db 723 TGAGAGTCTTTTACCTCAACACATTTTCAAGCAATCATAGACATCCCGAAGCGCTCTG 782
Qy 771 ATTAATTTTCCAGAGAAAACAGGGATTTCTTAACAAAATGTGAGAGGATACACAGAGC 830
Db 783 TCTAGAGCCACCTAAA-----CTAGAAGGCATGTCAAGACATATACAAGGC 830
Qy 831 CTTGACTCTGACGATGTAGAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCTAGTCT 890
Db 831 GCTAGACTCAGATGATGTGAGCTTTTCAAGATGCTTTTGTAGAGGACACACCAATCT 890
Qy 891 TGATCATGCTTTGACCTGACCTACCGCGTCAACATTTGTGACTCCAAAATTTACAACCGA 950
Db 891 CGATGAGGCTATGCTCTTCTATTTTGTCTACCTGCTGCTGCTGCTGCTGCTGCTGCTG 950
Qy 951 GCTTTTGGATCTGCACTTTCAGATGTTTAAATCATAGAAACCAAGAGGTTTATCTGTTCT 1010
Db 951 TCTCTCTGAGCTTGAGCTTGCGATGTTAACTTAGAAATCCGAGGGATACACTGTGCT 1010
Qy 1011 TCACATTTCTGCGAGCGAAGAGCGCTTAAATCATTTCTCTCTCTTTTAAACCAAGGGGCG 1070
Db 1011 TCATGTTCTGCGATGCGAAGAGGCGGAGTTGATAATCTTTGTTAAATGAAGGGGCG 1070
Qy 1071 TCGACAGCAGATGTTTACATTCGATCGGAGAAAAGCGGTTCAAATCTCAAAAAGACTAAC 1130
Db 1071 AAATATTTAGACACACATTTGATGTTAGAACCGCTTTAGTGAATGTAAGACTCAC 1130
Qy 1131 AAAACAAGGGGATTTCTTTGGGTTTCCGAGAGGAAACCTTCTCCAAAAGATAGGTT 1190
Db 1131 TAAAGCGGATGACTCAAAATAGTACGAGGAGCTAGCGCTTCTCTGAAAAGCGGAT 1190
Qy 1191 ATGTTTGAATTAAGTGGACGACCTGTAAGAGG---ACCCACAACCTCGGAGAGCATC 1247
Db 1191 ATGCATAGAGGACTTGACATGAAACAAAATCTAGAAATTTGTGCGCTATAGAGCTTC 1250
Qy 1248 AGTTTCTCTGCAATGGCAGGTGAGAGTCTACGAGGAGGTTGCTGTATCTTGAACCG 1307
Db 1251 ACTTCTCTTCCAGTAACTCCAGAGGATTTGAGGATGAGTTGCTCTTATATGAACCG 1310
Qy 1308 AGTTGCTTTGGAAGATTAATGTTCCGATGAGGCAAGAGTAGCAATGAGATTTGCTCA 1367
Db 1311 AGTTGCACTTTGCTGCACTTCTCTTCCAGTGGAACTGAAACTGTACAGGATTTGCCAA 1370
Qy 1368 AGTGATGCACTTTTGGATTTA---ACCTGGGTTCTGTCGAAATCCACCTCTGAAAG 1424
Db 1371 ATTGGAGGAAACATGCGATTTACAGCTTCTAGTCTGAGCTGATCATCATTTGGTGA 1430
Qy 1425 ACAACGCAACTGTTGATCTAAATGAAAGTCTTTTCAATAATGAAGAGAAACACTTAGC 1484
Db 1431 AAGCGGACATCACTAGACCTAAATATGCGCGCTTCCAAATCCCATGAGAAGCATTTGAG 1490
Qy 1485 TCGGATGACAGCACTCTCCAAAACAGTGGAGCTCGGGAACCGTTTTTCCCGGATGTT 1544
Db 1491 TAGACTAAGAGCACTTTGTAACACCGTGAACCTGGGGAACCGTACTTCAACACGATGTT 1550
Qy 1545 GAACGTGCTCGAAGATCATGATGATGAACTGATCGGTTTCCCTCGGAAGAGACAC 1604
Db 1551 GCTTGATCATTTATGATCTGAGGACTTGAATCATCTTGTAGGTTAAGAGATAC 1610
Qy 1605 GTCCGG-----GAGAAGAGGAGAGGTTTCAATGACCTGCGAGGATGTTCTTCAGAA 1655
Db 1611 TCTTGAGAACCGCTACAAAAGAACAAAGGTACATGGAACCTACAGAGACTCTGATGAA 1670
Qy 1656 GGCAITTCAGAGGACAAAGAGAGAGATGACAGGTC 1691
Db 1671 GACCTTTAGTGAGGACAAAGGAGGATGTGGAAGTC 1706

RESULT 14

US-09-934-455-433
; Sequence 433, Application US/09934455
; Publication No. US20030121070A1
; GENERAL INFORMATION:
; APPLICANT: Adam, Luc

; APPLICANT: Creelman, Robert
; APPLICANT: Dubell, Arnold
; APPLICANT: Heard, Jacqueline
; APPLICANT: Jiang, Cai-Zhong
; APPLICANT: Keddle, James
; APPLICANT: Pilgrim, Marsha
; APPLICANT: Ratcliffe, Oliver
; APPLICANT: Reuber, Lynne
; APPLICANT: Riechmann, Jose Luis
; APPLICANT: Yu, Guo-Liang
; APPLICANT: Pineda, Omaira
; TITLE OF INVENTION: Genes for Modifying Plant Traits IV
; FILE REFERENCE: MBI-0025
; CURRENT APPLICATION NUMBER: US/09/934,455
; CURRENT FILING DATE: 2001-08-22
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: MBI-0022
; PRIOR FILING DATE: 2001-11-16
; PRIOR APPLICATION NUMBER: MBI-0023
; PRIOR FILING DATE: 2001-04-17
; NUMBER OF SEQ ID NOS: 516
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 433
; LENGTH: 2083
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (54)..(1859)
; OTHER INFORMATION: G1290
US-09-934-455-433

Query Match 18.6%; Score 380.4; DB 11; Length 2083;

Best Local Similarity 57.4%; Pred. No. 9.9e-78;
Matches 778; Conservative 0; Mismatches 551; Indels 27; Gaps 4;

Qy 351 CGGCGAGAGGTGAGGTCGGGTACGAGGCGCTCGGCTGGTGTCTCGACTACCTCTACAG 410
Db 404 CGCAGAGATTACAGAGTTCGCTTGTACTCGTTGTGGCGTTTGGCGTATGTTACAG 463
Qy 411 CGGCGCGGTGCGGACCTGCCCCAAGGGCGGCTGCTGCTGCGACGAGGACTGGGCCA 470
Db 464 CGGCGAGTGGGTCCCGCGGAGGAGCTTCTGCTTGGCTAGACGAGATTGTTGCCA 523
Qy 471 CGTGGGTGCGACCCCGCGCTGCGGTTTCATGCGCAGGCTCTTCTTGGCGCTCCACCT 530
Db 524 CGTGGCTTGGCGGTCAAAGGTGGATTTTCATGGTGGAGTTCTTTATCTGTCTTTCGTTT 583
Qy 531 CCAGTCCCGGAGCTCACCAACCTCTTCCAGCGGCGTCTCCTTGATGTCCTTGTGAAGGT 590
Db 584 CCAGATTCAAGATTAGTTACTCTGTATGAGAGGAGTCTTGGAAATTTGTAGACAAAGT 643
Qy 591 TGAAGTAGATAACCTTCTTATTTGATCTTATCTGTTGGCAACTTATGCAACAATCTTGAT 650
Db 644 TGTAGTCAAGACATCTTGGTTATATTCAAGCTTGATCTCTATGTGTGTAACAACATACAA 703
Qy 651 GAACTGCTTGAAGATCGCTTGTATGTTAGTCCGTCGCTCAACCTTGCATGATTAATCTCT 710
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Qy 711 TGAGAAGTCAATGCTCCAGATGTTTATCAAGCAGATTTATGATGACCGCTTAAGCTCGG 770
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Qy 771 ATTAATTTCCAGAAAACAGGGATTTCTTAAACAATGTGAGAGGATACACAGAGC 830
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Qy 831 CTTTCACTCTGACGATGTAGAGTGTAGTCTGAGGATGCTGCTCACTGAAGGACAGACAAATCT 890
Db 872 GCTAGACTCAGATGATGTTGAGCTTGTCAAGATGCTTTTGTAGAGGACACACCAATCT 931

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QY 891 TGATGCGTTTGCACCTGCACTACGCGTTCGAACATTTGACTCCAAATTTACACCGA 950
Db 932 CGATGAGCGTATGCTCTTCATTTGCTATCGCTCAGTGGCTGGAAGACGCGTATGA 991
QY 951 GCTTTTGGATCTCGACCTTGCAGATGTTAATCATAGAAACCAAGAGGTTATCTGTCT 1010
Db 992 TCTCCTCGAGCTTGAGCTTGGGATGTTAACTTAGAATCGAGGGGATACACTGTCT 1051
QY 1011 TCACATTTCTGGAGGGAAGAGAGCCCTAAATCATTTGTCTCCCTTTTAAACCAAGGGGC 1070
Db 1052 TCATGTTCTGCGATGCGGAAGAGCGGAAGTTGATAATCTTTGTTTAAATGAAGGGGC 1111
QY 1071 TCGACCACAGATGTTACATTCGATGGGGAAGAGCGGTTCAATCTCAAAAGACTAAC 1130
Db 1112 AAATATTTTACACACATGATGGATGAGAGCCCTTTAGTGATTTGAAACGACTCAC 1171
QY 1131 AAAACAAGGGGATTAATTTGGGGTTACCGAAGAGGAAACCTTCCAAAGAGATAGGTT 1190
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QY 1191 ATGATTTGAAATACCTGGAGAGCTGGAAGAGGG---ACCCAACTCGGAGAGCATC 1247
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QY 1308 AGTTCTTTGGCAAGGATTTATGTTTCCGATGGAGGCAAGAGTAGCAATGGATATTGCTCA 1367
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QY 1368 AGTGATGGAATCTTTGGAATTTA---ACCTGGGTTCTGGTGCAATCCACCTCTGAAAG 1424
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Db 1472 AAAGCGGACATCAGTAGACCTTAAATATGGCGCGTTTCCAAATCCATGGAAGCATTTGAG 1531
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QY 1545 GAACTGCTCGACAAGATCATGGATGATGAATCTGATCCGGTTTCCCTCGGAAGAGACAC 1604
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QY 1605 GTCCGCG-----GAGAAGAGAGAGGTTTTCATGACCTGCGAGGATGTTCTTCAGAA 1655
Db 1652 TCCTGAGAAACGGCTTACAAAGAGGAAAGGTACATGGAACCTACAGAGACTCTGATGAA 1711
QY 1656 GCACTTCCAGGAGCAAGGAGGAGAAATGACAGGTC 1691
Db 1712 GACCTTTAGTGAAGCAAGGAGGAATGTGGAAGTC 1747
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RESULT 15

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US-10-328-675A-45
; Sequence 45, Application US/10328675A
; Publication No. US20030159171A1
; GENERAL INFORMATION:
; APPLICANT: Salmeron, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: 30857USNPDI
; CURRENT APPLICATION NUMBER: US/10/328, 675A
; CURRENT FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: 09/519, 232
; PRIOR FILING DATE: 2000-03-06
; PRIOR APPLICATION NUMBER: 60/219, 338
; PRIOR FILING DATE: 1999-03-09
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; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 45
; LENGTH: 653
; TYPE: DNA
; ORGANISM: Solanum tuberosum
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(651)
; OTHER INFORMATION: Potato A
; FEATURE:
; NAME/KEY: Misc Feature
; LOCATION: (1)..(1)
; OTHER INFORMATION: Xaa is either Glu or Asp
; FEATURE:
; NAME/KEY: Misc Feature
; LOCATION: (215)..(215)
; OTHER INFORMATION: Xaa is Leu
US-10-328-675A-45
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Query Match 17.6%; Score 359.8; DB 12; Length 653;
Best Local Similarity 72.0%; Pred. No. 3.8e-73;
Matches 466; Conservative 2; Mismatches 179; Indels 0; Gaps 0;
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QY 673 GATATGGTAGTCCCGTCAACCTTGACATGATTACTCTTGAGAAAGTCAATTCGCTCCAGAT 732
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Db 61 ATCTGAAACAAATCACTGATTCACGCTGCTGAACTTGGTCTCAAGGCGCTGAAAGCAAT 120
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Db 121 GGTCTTCTGATAAATGTTTAAAGAGGATACATAGGCGATTTGGACTCTGATGATGTTGAG 180
QY 853 CTAGTCAGGATGCTGCTCAGTCAAGAGGAGCAACAACTTTGATGATGCGTTTGCACATGAC 912
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QY 913 TACGCGTCGAACATTTGAGTCTCAAAATTTACAAACGAGCTTTTGGATCTCGCACTTGA 972
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QY 973 GATGTTAATCATAGAAACCAAGAGGTTTATCTGTTCTTCACTTTGCTGCGAGGCGAAGA 1032
Db 301 GATGTTAATCATCAAAATCCTTAGAGGATACACGCTACTTTCATGTTGCTGCGATGAGGAA 360
QY 1033 GAGCTTAAATCATTTGCTCTCCCTTTTAAACCAAGGGGCTCGACAGCAGATGTTACATTC 1092
Db 361 GAGCTTAAATTTATAGTGTCTCCCTTTTAAACCAAGGAGCTAGACCTTCTGATCTGACATCT 420
QY 1093 GATGGAGAAAGCGGTTCAAAATCTCAAAAGACTAACAAACAGGGGATTTACTTTGGG 1152
Db 421 GATGGCAAAAGAACACTTCAAAATTTGTAAGGGCTCACTAGGCTTTGCGATTTTACTAAG 480
QY 1153 GTTACCGAAGAGGAAACCTTCTCCAAAGATAGGTTATGTTATTTGAAATACTTGGAGCAA 1212
Db 481 TCTACAGAGGAGGAAATCTGCTCCAAAGATCGTTATGATGATGATGATGATGATGATGAT 540
QY 1213 GCTGAAAGAGGAGCCCAACACTCGGAGAGCAGTCACTTTCTTTGCAATGGCAGGTGAG 1272
Db 541 GCAGAAAGAGAGATCCACTACTAGGAGAGCTTCTTATCTCTTGTGATGATGATGATGAT 600
QY 1273 AGTCTAGGAGAGGTTGCTGTATCTTGAACCGAGTGTGCTTTGGC 1319
Db 601 GATTGCGTATGAAGCTGTTATATCTTGAACCGAGTGTGCTTGGC 647
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Search completed: December 7, 2003, 02:34:42
Job time : 642 secs
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Result No.	Score			Query		DB	ID	Description
	Match	Length	Time					
1	590.2	28.9	1731	4	US-09-519-232-3	Sequence 3, Appli		
2	563.4	27.6	1767	4	US-09-519-232-1	Sequence 1, Appli		
3	562	27.5	2296	4	US-09-519-232-63	Sequence 63, Appli		
4	420.6	20.6	2011	2	US-08-989-478-6	Sequence 6, Appli		
5	420.6	20.6	2011	2	US-08-989-478-7	Sequence 7, Appli		
6	420.6	20.6	2011	3	US-08-996-685-6	Sequence 6, Appli		
7	420.6	20.6	2011	3	US-08-996-685-7	Sequence 7, Appli		
8	411.8	20.2	1608	2	US-08-989-478-11	Sequence 11, Appli		
9	411.8	20.2	1608	3	US-08-996-685-11	Sequence 11, Appli		
10	409.2	20.1	1597	2	US-08-989-478-9	Sequence 9, Appli		
11	409.2	20.1	1597	3	US-08-996-685-9	Sequence 9, Appli		
12	400.4	19.6	1194	2	US-08-989-478-13	Sequence 13, Appli		
13	400.4	19.6	1194	3	US-08-996-685-13	Sequence 13, Appli		
14	381.8	18.7	1740	4	US-09-519-232-5	Sequence 5, Appli		
15	380.4	18.6	1803	4	US-09-519-232-19	Sequence 19, Appli		
16	380.4	18.6	1818	4	US-09-519-233-71	Sequence 71, Appli		
17	359.8	17.6	653	4	US-09-519-232-45	Sequence 45, Appli		
18	344.2	16.9	659	4	US-09-519-232-29	Sequence 29, Appli		
19	315.8	15.5	1428	4	US-09-569-804-1	Sequence 1, Appli		
20	315.8	15.5	2368	4	US-09-569-804-2	Sequence 2, Appli		
21	311.8	15.3	2154	4	US-09-551-778-1	Sequence 1, Appli		
22	311.4	15.3	2673	4	US-09-519-232-73	Sequence 73, Appli		
23	309.8	15.2	1830	4	US-09-569-804-6	Sequence 6, Appli		
24	309.8	15.2	2120	4	US-09-569-804-8	Sequence 8, Appli		
25	306.2	15.0	1824	4	US-09-569-804-5	Sequence 5, Appli		
26	306.2	15.0	2420	4	US-09-569-804-7	Sequence 7, Appli		
27	277	13.6	498	4	US-09-519-232-37	Sequence 37, Appli		

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QY 1076 CAGCAGATCTTACATTCGATGGGAGGAAGCCGTTCAAAATCTCAAAAAGACTAACAAAC 1135
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QY 1136 AAGGGGATTAATTTGGGGTTACGAAGAAGAAACCTTCTCAAAAGATAGTATGTA 1195
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QY 1196 TTGAATATCTGAGCAAGCTGAAGAGGACCCCAACTCGGAGGAAGCATCAGTTTCTC 1255
Db 1181 TTGAGATCTCGAGCAAGCAGAAAGAGAGACCTCTGCTAGGAGAAGCTTCTGTATCTC 1240
QY 1256 TTGCAATGCGAGGTGAGAGTCTACGAGGAAGGTTGCTGTATCTTGAACCCGAGTTGCTT 1315
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Db 1301 TGCTTAACTCTTTTCCAAATGGAAGCTTAAAGTTGCAATGGACATTTGCTCAAGTTGATG 1360
QY 1376 GAACCTTTGGAATTTAACTCGGTTCTGTTGCAAACTCCACTCTCGAAGCAACAGCAAA 1435
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Db 1541 ATAAGATCATGATGCTGATGACTTGTCTGAGATAGCTTACATGGGAATGATACGGCAG 1600
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QY 1661 TCCAGCAGGACCAAGGAGGAGATGACAGGTGCGGGCTCTCGTCTGCTGCTCATC 1715
Db 1661 TCACTGAGGATAAAGAAATATGATAAGACTAACAAACATCTCCTCATCTTGTTC 1715

RESULT 3

US-09-519-232-63
; Sequence 63, Application US/09519232
; Patent No. 6528702
; GENERAL INFORMATION:
; APPLICANT: Salmemon, John
; APPLICANT: Weislo, Laura
; APPLICANT: Willits, Michael
; APPLICANT: Mengiste, Tesfaye
; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
; FILE REFERENCE: S-30857A/RTP2095
; CURRENT APPLICATION NUMBER: US/09/519,232
; CURRENT FILING DATE: 2000-03-06
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 63
; LENGTH: 2296
; TYPE: DNA
; ORGANISM: Beta vulgaris
; FEATURE:
; NAME/KEY: CDS

; LOCATION: (113)...(1927)
; OTHER INFORMATION: full-length Sugarbeet cDNA sequence
US-09-519-232-63

Query Match 27.5%; Score 562; DB 4; Length 2296;
Best Local Similarity 61.2%; Pred No. 4,9e-112; Indels 39; Gaps 5;
Matches 1014; Conservative 0; Mismatches 605;

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QY 1549 GTGCTCGCAAGATCATG-----GATGATGAACCTGATCGGTTTCTCTCGAAGAGAC 1602
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QY 1603 ACGTCCCG-----GAGNAGAGGAGGTTTTCATGACCTCGAGGATGTTCTTCAG 1653
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Db 1762 TCCACATCGAATCAACCGGTGGAAGAGG 1791

RESULT 5
US-08-989-478-7
; Sequence 7, Application US/08989478
; Patent No. 5986082
; GENERAL INFORMATION:
; APPLICANT: Uknes, Scott
; APPLICANT: Hunt, Michelle
; APPLICANT: Steiner, Henry-York
; APPLICANT: Ryals, John
; TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
; TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 5986082artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 5986082th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,478
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/033,177
; FILING DATE: 13-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,379
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,382
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,730
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,021
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,022
; FILING DATE: 10-JAN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-21214/P1/CGC1911
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (919) 541-8587
; TELEFAX: (919) 541-8689
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 2011 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 43..1824
; OTHER INFORMATION: /product= "altered form of NIM1"
; OTHER INFORMATION: /note= "Serine residues at amino acid positions 55 and 59 in
; OTHER INFORMATION: wild-type NIM1 gene product have been changed to Alanine
; OTHER INFORMATION: residues."
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 205..217
; OTHER INFORMATION: /note= "nucleotides 205 and 217

APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,024
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/875,015
FILING DATE: 16-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 2011 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Arabidopsis thaliana
FEATURE:
NAME/KEY: misc feature
LOCATION: 1..2011
OTHER INFORMATION: /note= "NIM1 cDNA sequence"
NAME/KEY: CDS
LOCATION: 43..1824
OTHER INFORMATION: /product= "NIM1 protein"
US-08-996-685-6

Query Match 20.6%; Score 420.6; DB 3; Length 2011;
Best Local Similarity 58.4%; Pred. No. 1.4e-81;
Matches 823; Conservative 0; Mismatches 557; Indels 30; Gaps 4;

QY	352	GGCGAGGAGTGGAGTGGGTACGAGCGCTCGCGCTGGTCTCGACTACCTCTACAGC	411
DB	394	GCCAAAGGATTACGAAGTCGGTTTCGATTGGTGTGACTGTTTGGCTTATGTTTACAGC	453
QY	412	GGCCGCGTGGCGACCTGCCAAGCGCGCTCGCTCGAGCGAGACTGCGCCAC	471
DB	454	AGCAGATGAGACCGCCCTAAAGAGTTCTGAATGCGCAGACGAGATTGCTGCCAC	513
QY	472	GTGCGGTGCCACCCCGCGTCCGTTTCATGGCGCAGGTCCTCTTCGCGCCTCCACCTTC	531
DB	514	GTGGCTTGGCGCGCGGTGATTTTCATGTTGGAGGTTCTCTATTGGCTTTTCATCTTC	573
QY	532	CAGGTGCGCGAGCTCACCACCTCTTCAGCGCGCTCTCTTGATGTCCTTGATAGGTT	591
DB	574	AAGATCCCTGAATTAATTACTCTCTATCAGAGGCACTTATTGGACGTTGTAGACAAAGTT	633
QY	592	GAAGTAGATAACCTTCTATTGATCTTATCTGTGTGCAACTATGCAACAAATCTTGCATG	651
DB	634	GTTATAGAGGACACATTGGTTATATCTCAAGCTTGCTATATATGTTGGTAAGCTTGTATG	693
QY	652	AACTGCTTGAAGATGCTTGATATGGTATGGTATGGTATGGTATGGTATGGTATGGT	711
DB	694	AAGCTATTGGATAGATGTAAGAGATTTATGTCAGTCTTAATGTAGATATGGTATGTTCT	753
QY	712	GAGAGTCTATGCTCCAGATGTTATCAAGCAGATTTATGATGACGCTTAAGCCTCGA	771

RESULT 7

US-08-996-685-7

	Query Match	20.6%;	Score 420.6;	DB 3;	Length 2011;
	Best Local Similarity	58.4%;	Pred. No. 1.4e-81;		
	Matches 823;	Conservative	0;	Mismatches 557;	Indels 30; Gaps 4;
QY	352	GGCAGGAGGTGGAGGTCCGGTACAGCGCTGGGGTGGTGGCTCGACTCTACAGC	411		
DB	394	GCCAAGGATTACGAAGTCGGTTTCGATTCGGTTGTGACTGTTTGGCTTATGTTTACAGC	453		
QY	412	GGCCGCGTGGCGACCTGCCAAGCGCGCTGCCCTCGCTCGACGAGGACTGGCCAC	471		
DB	454	AGCAGAGTGAGACCGCCGCTTAAAGGAGTTTCTGAATGCGCAGACGAAATGCTGCCAC	513		
QY	472	GTGCGGTGCCACCCCGCGCTCGCGTTCAATGGCGAGGTCCTCTTCGCGCGCTCCACCTTC	531		
DB	514	GTGGCTTGGCGCGCGGTGGATTTCAATGTGGAGGTTCTCTATTTGGCTTTCATCTTC	573		
QY	532	CAGGTGCGCGAGCTCACCAACTCTTCAGCGGCGTCTCCTTGATGTCCTTGATAGGTT	591		
DB	574	AAAGTCCCTGAATTAATTAATCTCTCTATCAGAGGCATTTATTGGACGTTGTAGACAAAGTT	633		
QY	592	GAAGTAGATTAACCTTCTATTGATCTTAATCTGTGCGCAACTTATGCAACAATCTTGCAATG	651		
DB	634	GTTATAGAGGACACATGTGTTTAACTCAAGCTTGCTAATATATGTGGTTAAGCTTGATG	693		
QY	652	AAACTGCTTGAAGAGTGCCTTGATATGGTGTGCGGTCAAACTTTGACATGATTACTCTT	711		
DB	694	AAAGTATTGGATAGATGTAAAGAGATTATTGTCAAGTCTAATGTAGATATGGTTAGTCTT	753		
QY	712	GAGAGTCAATTCCTCCAGTGTATCAAGCAGATTATTGTATGACGCTAAGCCTCGGA	771		
DB	754	GAAAGTCAATTCGCGAAGAGCTTGTTAAAGAGATAATTGTATAGACTTAAGAGCTTGGT	813		
QY	772	TTAATTTTCCACGAAAAACAAGGGATTTCTCTAACAACATGTGAGGAGGATACACAGGCC	831		
DB	814	TTGGAGGTACCTTAAAGTAAAG-----AAACATGCTCGAAATGTACATAAGGCA	861		
QY	832	CTTGACTGTGACGATGTAGAGCTAGTCAAGATGCTGCTCACTGAAGGACAGACAAATCTT	891		
DB	862	CTTGACTCGGATGATATTGAGTTAGTCAAGTTGCTTTTGAAAGAGATCAACCAATCTA	921		
QY	892	GATGATCGGTTTGCACTGCACTACGCGGTGCAACATTTGTGACTCCAAAAATTACAACCGAG	951		
DB	922	GATGATCGGTGTCTCTTCATTTCCGTGTTCATATTGCAATGTGAAGACCGCAACAGAT	981		
QY	952	CTTTTGGATCTGCACCTTCCAGATGTTAATCATAGNAACCCAAGAGTTTACTGTTCCTT	1011		
DB	982	CTTTTAAAACTTGATCTTCCGATGTCAACCAATAGGAATCCGAGGGGATATACGGTGCCT	1041		
QY	1012	CACATTTGCTCGAGGCGAAGAGAGCCTTAAATTCATTGTCTCCCTTTTAAACGAGGGGCT	1071		
DB	1042	CATGTTGCTCGATGCGAAGAGGCCACAATTGATACTATCTCTATTGAAAAAGGTGCA	1101		
QY	1072	CGACCAAGCAGATGTTTACATTCGATGGGAAAAAGCGGTTCAAAATCTCAAAAGACTAA	1131		
DB	1102	AGTGTCATCAGAACAACCTTTGGAAGGTAGAACCGCACTCATGATCCGAAAAACGACCT	1161		
QY	1132	AAACAAGGGATTACTTTTGGGGTTTACCGAAGAGGAAAACTTCTCTCAAAAGATAGGTTA	1191		
DB	1162	ATGCGGTTGAATGTGTAATAATATCCCGAGCAATGCAAGCATTTCTCTCAAGGCCACTA	1221		
QY	1192	TGTAATTGAATATCTGGAGCAAGCTGAAAGAGGGACCCCACTCGGAGAGCATCAGTT	1251		

892 GATGATCGCTTTGCACTGACCTACGCGGTGCAACATTTGCACTCCAAATTAACAACGAG 951
922 GATGATCGCTGCTCTTCAATTCGCTGTTGCAATTTGCAATGTTGAAGACCGCAACAGAT 981
952 CTTTGGATCTGCACTTCAGATGTTAATCATAGAACCCCAAGAGGTTATATCTTTT 1011
982 CTTTAAAACTTGATCTTCCGATGTTCAACCATAGGAATCCGAGGGGATATACGGTGT 1041
1012 CACATTCGTCGAGGCGAAGAGAGCCTAAATCATTTGCTCTCTCTTTAAACCAAGGGGCT 1071
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1192 TGATTTGAATATCTGAGCAAGCTGAAAGAAGGAGCCCAACTCGGAAGCAGCATCAGTT 1251
1222 TGTTAGAAATATCTAGACCAAGAGCAACACGAGAACAAATTCCTAGAGATGTTCTCTCC 1281
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1312 GCTTTGCAAGGATTAATTTGTTCCGATGGAGGAGAGTACGATGATGATTTGCTCAAGTG 1371
1342 GCATTTGCTCAAGCTTTTTCACGGAAGCACAAGCTGCAATGAGATCGCGGAATG 1401
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1402 AAGGAACTATGTCAGTTTCATGTCAGTCTGAGCTCGACCTGACGCTCTCATGTCGAAG 1461
1429 CGACCACTGTTGATCTAATGAAAGTCTTTTCAATGAAAGAGAACTAGTCTGCG 1488
1462 AGAATCATCCGCGGTGTAAGATAGCACTTTTCAAGATCTCTAGAGAGCATCAAGTAGA 1521
1489 ATCAGAGCTCTCCAAACAGTGGAGCTCGGGAACGCTTTTCCCGGATGTTTCCGAAC 1548
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1549 GTGCTCGCAAGATCATGGA 1568
1582 GTGCTCGACAGATTATGA 1601

RESULT 9
US-08-996-685-11
Sequence 11, Application US/08996685
Patent No. 6031153
GENERAL INFORMATION:
APPLICANT: Ryals, John
APPLICANT: Friedrich, Leslie
APPLICANT: Umes, Scott
APPLICANT: Molina, Antonio
APPLICANT: Ruess, Wilhelm
APPLICANT: Knauf-Beiter, Gertrude
APPLICANT: Kung, Ruth
APPLICANT: Keesmann, Helmut
APPLICANT: Oostendorp, Michael
TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 6031153artis Corporation,
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 6031153th Carolina
COUNTRY: USA
ZIP: 27209

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996.685
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/761.543
FILING DATE: 6-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034.378
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034.379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034.382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034.730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035.021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035.022
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035.024
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/875.015
FILING DATE: 16-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-21215/P1/CGC1912
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 1608 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 43...1608
OTHER INFORMATION: /product= "Altered form of NIM1"
OTHER INFORMATION: /note= "C-terminal deletion compared to wild-type NIM1."
US-08-996-685-11

Query Match 20.2%; Score 411.8; DB 3; Length 1608;
Best Local Similarity 59.8%; Pred. No. 1e-79;
Matches 730; Conservative 0; Mismatches 475; Indels 15; Gaps 2;
QY 352 GCGCAGGAGGTGGAGGTGCGGTACGAGCGGCTGCGGTGCTCGACTTACCTCTACAGC 411
Db 394 GCAAGGATTACAAAGTCGTTTCGATTCGGTTGTCGCTTTTGGCTTATGTTTACAGC 453
QY 412 GCGCGCGTCGCGACCTGCCCAAGCGGCGTCTGCGTCGAGAGAGCTCGCGCCAC 471
Db 454 AGCAGAGTGAGACCGCGCCTAAAGAGTTTCTGAATGCGCAGACGAGAAATGCTGCCAC 513
QY 472 GTGCGGTGCCACCCCGCGCTCGGTTTCATGGCGAGGTCCTCTCGCGCCCTCCACCTTC 531
Db 514 GTGCGCTTGGCGCGCGCGGTGATTTTCATGTTGGAGGTTCTCTATTTGCTTTTATCTTC 573

QY	532	CAGTCCGCGAGCTCACAACTCTTCCAGCGGCGTCTCTTGAATGCTCTTGATAAAGTTT	591
DB	574	AAGATCCCTGAATTAATTACTCTCTATCAGAGGCACCTATTGGACGTTGTAGACAAAAGTT	633
QY	592	GAAGTAGATAACCTTCTATTGATCTTATCTGTGTCCCACTTATGCAACAAATCTTGCAATG	651
DB	634	GTTATAGAGACACATTTGGTTATACTCAAGCTTCTCTAATATATGTGGTAAGCTTGTATG	693
QY	652	AAACTGCTTGAAGATCCCTTGTATAGTAGTCCGGTCAAACCTTGCATGATTACTCTT	711
DB	694	AAGCTATTGGATAGATGAAGAGATTATGTCAAGTCTAATGTAGATATGGTTAGTCTT	753
QY	712	GAGAAGTATTTGCCTCCAGATGTTTAAAGCAGATTAATGATGACACGCTTAAGCCTCGGA	771
DB	754	GAAGAATCATTTGCCGGAAGACCTTGTAAAGAGATAATTGATAGACGTAAGAGCTTTGGT	813
QY	772	TTAATTTCCACGAGAAACAGGGATTTCTTAACAAATGTGAGGAGGATACACAGAGCC	831
DB	814	TTGAGGTACTTAAAGTAAG-----AAACATGTTCTGCAATGTACATTAAGGCA	861
QY	832	CTTGACTCTGACGATGTAGAGCTAGTCAAGGATGTGCTCACTGAAGGACAGACAAATCTT	891
DB	862	CTTGACTCGATGATATGAGTTAGTCAAGTTGCTTTTGAAGAGGATACACCAATCTA	921
QY	892	GATGATCGTTTGCACTGCACTACGCGTCGAACATTTGATGCTCAAAATTTACAAACGAG	951
DB	922	GATGATCGGTGTCTTCTTCAATTTGCTGTTGTCATATTGCAATGTGAAGACCGCAACAGAT	981
QY	952	CTTTTGGATCTCGACACTTGCAGATGTTAATCATAGAAACCCAGAGGTTTATCTGTCTTT	1011
DB	982	CTTTTAAACCTTGATCTTGGCGATGTCAACCATAGGAATCCGAGGGGATATACGCTGCTT	1041
QY	1012	CACATTTCTCGAGCGGAAGAGAGCCTAAATCATTTCTCTCCCTTTTAAACCAAGGGGGCT	1071
DB	1042	CATGTTGCTCGGATCGGAGAGGCCACAATTGATCTATCTCTATTGGAAAAGGTGCA	1101
QY	1072	CGACCAGCAGATGTTACATTTCGATGGGAGAAAAGCGGTTCAAAATCTCAAAAAGACTAA	1131
DB	1102	AGTGATCATCAGAAGCAACTTTTGGAGGTAGAACCGCACTCATGATCGCAAAACAGCCACT	1161
QY	1132	AAACAAGGGGATTAATTTGGGGTTACCGAAGAAGGAAAACTTCTCCAAAAGATAGGTTA	1191
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DB	1222	TGTGTAATAATCTAGAGCAAGAAGACAAACGAGAACAAATTCCTAGAGATGTTTCTCCC	1281
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DB	1342	GCATTTGCTCAACGCTCTTTTCCAACGGAAGCACAAGCTGCAATGGAGATCGCCGAAATG	1401
QY	1372	GATGGAACTTTGGAAATTAACCTG---GGTTCTGTGTCGAATCCACCTCTGTAAGACAA	1428
DB	1402	AAGGGAACTGTGAGTTTCATAGTGACTAGCCTCGAGCTGACCGTCTCACTGGTACGAAG	1461
QY	1429	CGGACAACTGTGATCTAAATGAAAGTCTTTTCAATGAAGAAGAACACTTTAGCTCGG	1488
DB	1462	AGAACATCACGGGTGTAAGATAGCACTTTTCAGATCTTAGAAGAGCATCAAGTAGA	1521
QY	1489	ATGACAGCACTCTCAAAAACAGTGGAGCTCGGGAACCGCTTTTCCCGCGATGTTTCGAAC	1548
DB	1522	CTAAAGCGCTTCTAANAACCGTGGAACTCGGGAACGATTTCTCCCGCGCTGTTCGGCA	1581
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RESULT 10
US-08-989-478-9
; Sequence 9, Application US/08989478
; Patent No. 5986082
; GENERAL INFORMATION:
; APPLICANT: Uknes, Scott
; APPLICANT: Hunt, Michelle
; APPLICANT: Steiner, Henry-John
; APPLICANT: Ryals, John
; TITLE OF INVENTION: ALTERED FORMS OF THE NIM1 GENE CONFERRING
; TITLE OF INVENTION: DISEASE RESISTANCE IN PLANTS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 5986082artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 5986082th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,478
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/033,177
; FILING DATE: 13-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,379
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,382
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,730
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,021
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,022
; FILING DATE: 10-JAN-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Meigs, J. Timothy
; REGISTRATION NUMBER: 38,241
; REFERENCE/DOCKET NUMBER: PF/5-21214/P1/CGC1911
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (919) 541-8587
; TELEFAX: (919) 541-8689
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1597 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..1410
; OTHER INFORMATION: /product= "Altered form of NIM1"
; OTHER INFORMATION: /note= "N-terminal deletion compared to
; OTHER INFORMATION: sequence."
US-08-989-478-9

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Qy

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Qy 436 GGGCGTGCCTCTGCTGCAAGAGACTGCGCCACGTCGGGTGCCACCCCGCGTGGCG 495
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Qy 1453 AGTCTCTTCAATGAAGAAAGAACCTTAGCTCGGATGACAGCACTCTCCAAACAGTG 1512

1072 GCACCTTTAGATCTTAGAGAGCATCAAGTAGACTAAAGCGCTTTTAAACCGTG 1131
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RESULT 11
US-08-996-685-9
; Sequence 9, Application US/08996685
; Patent No. 6031153
; GENERAL INFORMATION:
; APPLICANT: Ryals, John
; APPLICANT: Friedrich, Leslie
; APPLICANT: Uknes, Scott
; APPLICANT: Molina, Antonio
; APPLICANT: Rues, Wilhelm
; APPLICANT: Knauf-Beiter, Gertrude
; APPLICANT: Kung, Ruth
; APPLICANT: Kessmann, Helmut
; APPLICANT: Oostendorp, Michael
; TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS
; NUMBER OF SEQUENCES: 32
; CORRESPONDENCE ADDRESS:
; ADDRESS: No. 6031153artis Corporation
; STREET: 3054 Cornwallis Road
; CITY: Research Triangle Park
; STATE: No. 6031153th Carolina
; COUNTRY: USA
; ZIP: 27709
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,685
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/761,543
; FILING DATE: 6-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,378
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,379
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,382
; FILING DATE: 27-DEC-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/034,730
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/035,021
; FILING DATE: 10-JAN-1997

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US-08-996-685-9
Primer INFORMATION: sequence...

Query Match      20.1%; Score 409.2; DB 3; Length 1597;
Best Local Similarity 58.3%; Pred. No. 3.7e-79;
Matches 808; Conservative 0; Mismatches 548; Indels 30; Gaps 4;

QY      376 GAGCGGTGCGGTGCTCGACTACCTCTACAGCGCGCGTGGGACCTGGCCAAAG 435
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QY      436 GCGCGGTGCTCTCGGTGCGAGGAGACTGGCGCCACGTCGGGTGCCACCCCGCGTCGCG 495
      |||
Db      64 GGAGTTCTTGAATGCGCAGACGAGAAATGTGCTGCCACGTGGCTTGGCGGCGCGGTGGAT 123

QY      496 TTCAATGGCGCAGGTCCTCTTGGCCGCTCCACCTTCCAGGTGCGGAGCTCACCAACCTC 555
      |||
Db      124 TTCAATGTTGAGGTTCTCTATTGGCTTTCATCTTCAAGATCCCTGGAATTAATTACTCTC 183

QY      556 TTCAGGCGGTCTCTTGTGATGTCCTTGATAGGTTGAAGTAGATAACCTTCTATTGATC 615
      |||
Db      184 TATCAGAGGCACTTATTGGAGCTTGTAGACAAAGTTGTTATAGAGACACATTGGTTATA 243

QY      616 TTATCTGTGGCAACTTATGCAACAAATCTTGATGAAACCTCTTGAAGAGTCCTTGAT 675
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Db      244 CTCAAGCTTGTCTATATATGTTGGTAAAGCTTGTATGAAGCTATTGGATAGATGTAAGAG 303

QY      676 ATGTTAGTCCGCTCAAACTTGACATGATTACTCTTGAGAAGTCAATTGCTCCAGATGT 735
      |||
Db      304 ATTATTGTCAGTCTAATGTAGATATGTTAGTCTTGAAGTCAATTGCGGAAGCTT 363

QY      736 ATCAAGCAGATATTGATGTCAGCCTTAAGCTCGGATTAATTTCCACGAAACCAAGGA 795
      |||
Db      364 GTTAAAGAGATAATTGATAGACGTAAGAGCTTGGTTGGAGGTACCTAAAGTAAAG --- 420

QY      796 TTTTCTTAACAAACATGTGAGAGGATACACAGAGCCCTTGACTCTGACGATGTAGAGCTA 855
      |||
Db      421 -----AAACATGCTCTGAAATGTAATGAAGGCATTTGATCGGATGATATTGAGTTTA 471

QY      856 GTCAGGATGCTGCTCACTGAAAGGACAGACAAATCTTGATGATGCGTTTGCACCTGCACTAC 915
      |||
Db      472 GTCAAGTTGCTTTTGAAGAGGATCACACCAATCTAGATGATGCGTGTGCTCTTCAATTTC 531

QY      916 GCCCTCGAACATTTGTGACTCCAAATTTACACCGAGCTTTTGGATCTCGCATTTGCAGAT 975
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```

STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: NO. 5986082th Carolina
COUNTRY: USA
ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/989,478
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/033,177
FILING DATE: 13-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-21214/P1/CGC1911
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 1194 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: CDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1194
OTHER INFORMATION: /product= "Altered form of NIM1"
OTHER INFORMATION: /note= "N-terminal/C-terminal chimera."
US-08-989-478-13

Query Match 19.6%; Score 400.4; DB 2; Length 1194;
Best Local Similarity 59.8%; Pred. No. 2.6e-77;
Matches 715; Conservative 0; Mismatches 466; Indels 15; Gaps 2

QY 376 GAGGCGCTGCGGCTGGTCTCGACTACTCTCTACAGCGCGCGCGCTCGCGGACCTGCGCCAAAG 435
Db 4 GATTGGTTGTGACTGTTTTCGCTTATGTTTACAGCAGCAGAGTGAGACCGCGCGCTAAA 63
QY 436 GCGGCGGTGCCTCTGGCTCGAGAGACTGCGCCACACGTCCGGTGGCCACCCCGCGCTCGG 495
Db 64 GGAGTTTCTGAATGCGCAGACGAGAAATGGCTGGCCACGTGCTTCGCGCGCGCGGTGGAT 123
QY 496 TTTCATGCGGCAGGTCTCTCTTCGCGCCCTCCACCTTCCAGGTTCGCGGAGCTCACCAACCTC 555
Db 124 TTCACTGTGAGAGTTCCTATTTCGCTTCATCTTCAAGATCCCTGAATTAATTAATCTCTC 183
QY 556 TTCCAGCGGCGTCTCCTTGATGTCCTGATAGGTTGAAGTTGAAGTAACTTCTATTGATC 615
Db 184 TATCAGAGGCACCTTATTGGACGTTGTAGCAAAAGTTGTATAGAGGACAAATTGGTTATA 243

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RESULT 13
US-08-996-685-13
; Sequence 13, Application US/08996685
; Patent No. 6031153
; GENERAL INFORMATION:
; APPLICANT: Ryals, John
; APPLICANT: Friedrich, Leslie
; APPLICANT: Uknes, Scott

APPLICANT: Molina, Antonio
APPLICANT: Rues, Wilhelm
APPLICANT: Knauf-Beiter, Gertrude
APPLICANT: Kung, Ruth
APPLICANT: Keesmann, Helmut
APPLICANT: Oostendorp, Michael
TITLE OF INVENTION: METHOD FOR PROTECTING PLANTS
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESS: No. 603153artis Corporation
STREET: 3054 Cornwallis Road
CITY: Research Triangle Park
STATE: No. 603153th Carolina
COUNTRY: USA
ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996,685
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/761,543
FILING DATE: 6-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,378
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,379
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,382
FILING DATE: 27-DEC-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/034,730
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,021
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,022
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/035,024
FILING DATE: 10-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/875,015
FILING DATE: 16-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: Meigs, J. Timothy
REGISTRATION NUMBER: 38,241
REFERENCE/DOCKET NUMBER: PF/5-21215/PL/CGC1912
TELEPHONE: (919) 541-8587
TELEFAX: (919) 541-8689
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 1194 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cdna
FEATURE:
NAME/KEY: CDS
LOCATION: 1..1194
OTHER INFORMATION: /product= "Altered form of NIM1"
OTHER INFORMATION: /note= "N-terminal/C-terminal chimera."
US-08-996-685-13

Query Match

19.6%; Score 400.4; DB 3; Length 1194;

Best Local Similarity 59.8%; Pred. No. 2.6e-77;
Matches 715; Conservative 0; Mismatches 466; Indels 15; Gaps 2;
QY 376 GAGCGCTGCGGCTGGTCTCGACTACCTCTACAGCGCGCGCTCGGCGACCTGCCCAAG 435
DB 4 GATTGGTGTGACTGTTTGGCTTATGTTTACAGCAGAGAGTGGACCGCGCTAAA 63
QY 436 GCGGCGTCCCTCTGGCTCGAGAGACTGCGCCCAAGTGGGTCGCCACCCCGCGCTCGG 495
DB 64 GGAGTTTCTGAATGCGCAGACAGAAATGCTGCCACGCTGGCTTGGCGCGCGCTGGAT 123
QY 496 TTCATGGCGCAGGTCCTCTTCCGCGCTCCACCTTCCAGGTCGCGAGCTCACCACTC 555
DB 124 TTCATGTTGGAGGTCTCTATTTGGCTTTTCATCTTCAAGATCCCTGAAATTAATCTCTC 183
QY 556 TTCAGCGCGCTCCTTGTATGTCCTTGAAGGTTGAAGTAGATAAATCTTCTATTGATC 615
DB 184 TATCAGAGCACTTATTTGGAGCTTGTAGACAAAGTTGTATAGAGCACATTTGGTTATA 243
QY 616 TTATCTGTGCAACTTATGCAAAATCTTGTGCAATGAACTGCTTGAAGATGCCCTGAT 675
DB 244 CTCAGCTTGTCTAATATATGTTGTAAGCTTGTATGAAGCTATTGGATAGATGTAAGAG 303
QY 676 ATGGTAGTCCGCTCAAACTTTCATGATGATTACTCTTGAGAGTCAATTCCTCCATGTT 735
DB 304 ATTATGTTCAAGTCTAATGTAGATATGGTTAGTCTTGAAGAGTCAATTCGCGAAGCTT 363
QY 736 ATCAAGCAGATTTATTTGATGACGCTTAAGCTCGGATTAATTTCAACAGAAACAAAGGA 795
DB 364 GTTAAAGAGATATTTGATAGAGCTTAAGAGCTTGGTTGGAGGTACCTTAAGTAAG--- 420
QY 796 TTTCTAAACAAACATGTGAGGAGGATACAGAGCCCTTTGACTCTGACGATGTAGAGCTA 855
DB 421 -----AAACATGCTCGAATGTACATAAGGCACCTGACTCGGATGATATTGAGTTA 471
QY 856 GTCAGGATGCTCTCACTGAAGGACAGACAATCTTGTATGATGCTTTGCTGCACTGCACTAC 915
DB 472 GTCAGTGTGCTTTTGAAGAGGATCACACCAATCTAGATGATGCGTGTGCTCTTCATTTTC 531
QY 916 GCGGTCGAACATTTGTGACTCCAAAATTAACACCGAGCTTTTGGATCTCGCACTTCAGAT 975
DB 532 GCTGTTGCATATTGCAATGTGAAGCCGACACAGATCTTTTAAACTTGTATCTTCCCAT 591
QY 976 GTTAATCATAGAAACCCCAAGAGTTATATCTGTTTTCACATTTGCTGCGAGCGGAAGAG 1035
DB 592 GTCAACCATAGGAATCCGAGGGGATATACGGTGTCTTCATGTTGCTGCGATGCGGAAGAG 651
QY 1036 CCTAAATCATTTGCTCCCTTTTAAACNAGGGGCTCGACAGCAGATGTTACATTCAT 1095
DB 652 CCACAAATTGATATCTCTATTGGAAAAGGTGCAAGTGCATCAGAAAGCACTTTGGAA 711
QY 1096 GGGAGAAAAGCGGTTTCAAAATCTCAAAAAGACTAAACAAAACAAAGGGGATTTACTTTGGGTT 1155
DB 712 GGTAGAACCGCACTCATGATCGCAAAACACGCCACTATGGCGGTTGAATTAATATATC 771
QY 1156 ACCGAAGAAGGAAAACCTTTCCAAAAGATAGTTTATGTTTGAATACTGGAGCAAGCT 1215
DB 772 CCGGAGCAATGCAAGCATTTCTCTCAAAAGCGCACTATGTGTAGAAAATACTAGAGCAAGAA 831
QY 1216 GAAAGAAGGGACCCACAACCTCGGAGAGACATCAGTTTCTTTCNATGGCAGGTGAGAGT 1275
DB 832 GACAAAACGAGAAACAAATTTCTTAGAGATGTTCTCTCCCTCTTTTGCAGTGGCGCGCATGAA 891
QY 1276 CTACGAGGAAGGTTGCTGTATCTTGAACACCGAGTTGCTTTGGCAAGGATTTATGTTCCG 1335
DB 892 TTGAAGATGACGCTGCTGATCTTGAATAATAGATGTGCACTTGTCTCAACGCTTTTCCA 951
QY 1336 ATGGAGGCAAGAGTAGCAATGGATATTGCTCAAGTGGATGGAACCTTTGGAATTTAACCTG 1395
DB 952 ACGGAAGCACAAAGCTGCAATGAGATCGCCGAAATGAAGGGAACATGTGAGTTTCATAGTG 1011
QY 1396 ---GGTTCTGTGCAAAATCCACCTCTCTGAAAGACAAACGAGCAACCTGTTGATCTCTAAATGAA 1452

Db 1012 ACTAGCCTCGAGCCTGACCGCTCTACTGCTAGCAAGAGAAACATCACCGGCTGTAAAGATA 1071
 QY 1453 AGTCCTTTTCAATAAAGAAAGAAACACTTAGCTCGGATGACAGCACTCTCCAAACAGTG 1512
 Db 1072 GCACCTTTTCAGNATCCTAGAGAGATCAAAAGTAGACTTAAAGCGCTTTTAAACCGTG 1131
 QY 1513 GAGCTCGGAAACGCTTTTCCCGGATGTTTCGAACGCTGCTCGACAAAGATCATGA 1568
 Db 1132 GAACTCGGAAACGATTTCTTCCCGGCTGTTCGGCAGTGTCTCGACCAAGATTATGAA 1187

RESULT 14

US-09-519-232-5

; Sequence 5, Application US/09519232

; Patent No. 6528702

; GENERAL INFORMATION:

; APPLICANT: Salmemon, John

; APPLICANT: Weislo, Laura

; APPLICANT: Weislo, Michael

; APPLICANT: Mengiste, Tesfaye

; TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF

; FILE REFERENCE: S-30857A/RTP2095

; CURRENT APPLICATION NUMBER: US/09/519,232

; NUMBER OF SEQ ID NOS: 74

; CURRENT FILING DATE: 2000-03-06

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 5

; LENGTH: 1740

; TYPE: DNA

; ORGANISM: Brassica napus

; FEATURE:

; NAME/KEY: CDS

; LOCATION: (1)..(1737)

; OTHER INFORMATION: Canola cDNA sequence

US-09-519-232-5

Query Match 18.7%; Score 381.8; DB 4; Length 1740;
 Best Local Similarity 58.4%; Pred. No. 3e-73;
 Matches 812; Conservative 3; Mismatches 510; Indels 66; Gaps 6;

QY 351 CGCGCAGGAGGTGGAGTGGGCTGAGCGGCTGAGCGGCTGGGGCTGCTCGACTACTCTACAG 410
 Db 345 CGCGCGGGAATACGAGCTCGGGTTCGATTCGTGGTGGCTGCTCGCGTACGTTTACAG 404
 QY 411 CGGCGCGCTGCGGAGCTCCCAAGCGCGGCTGCTCGCTCGAGAGGATGCGGCCA 470
 Db 405 CGCGCAGGTGAGCGCCCTCCGAAGGGAGTTTCTGAATCGCGAGACGAKAGCTGTGCCA 464
 QY 471 CGTGGGTGCCACCCCGCGCTCGGTTTCATGGCGAGGTCCTTTCGCGCGCTCCACCTT 530
 Db 465 CGTGGGTGCGCTCGGCTGTGGATTTTCATGGTGGAGTTTCTACTTGGCTTTGCTTT 524
 QY 531 CCAGGTGCGCGAGCTCACCACCTCTTCCAGCGGCTCTCTTGATGCTCTTTGATAAGGT 590
 Db 525 CCAGATTCCAGGAAGTGGTTACCATGATATCAGAGGCAATTTACTGGATGTTGTAGACAAAGT 584
 QY 591 TGAAGTAGATAACCTTCTATGATCTTATCTGTGCGCACTTATGCAACAAATCTTGAT 650
 Db 585 TAWCATAGAAGACACTTTGGTCTCTCAAGCTTGTAACTCTCGGTAAGACGCTGCAA 644
 QY 651 GAAACTGCTTGAAGATGCTTGATATGTTAGTTCGGTCAAACTTGACATGATTAATCT 710
 Db 645 GAAGCTATTTCGATAGTGCAGAGATCAATGTCAGTCTTAAGCTGATGTTGTTACTCT 704
 QY 711 TGAAGATCATTCCTCCAGATGTTATCAAGCAGATTTATGATGCAAGCTTAAGCTCGG 770
 Db 705 AAAGAAGTCAATTCCTCGAGACATTCGCAAGCAAGTAATCGATATCCGCAAAAGCTCGG 764
 QY 771 ATTAATTTCCAGAAACAAAGGATTTCTTAACAAACATGTGAGGAGTACACAGAGC 830
 Db 765 CTTGGAGGTAGCTGAA-----CCAGAGAAACATGTCTCCAAATACACAGAGC 812
 QY 831 CTTTGACTCTGACGATGTAGAGCTAGTTCAGGATGTGCTCACTGAGAGGACAGACAAATCT 890

Db 813 GCTTGAATCAGACATCTTGACCTTGTGCTATGCTTTTGAAGAGGCGCCACAGATCT 872
 QY 891 TGATGATGCGTTTGCACCTACGCGCTGCAACATTGTGACTTCAAAATTTACAACGA 950
 Db 873 AGACGAAGCGTATGCTCTCCATTTTGGCTTGTGCGATTTGGAAGACAGCGAGGAA 932
 QY 951 GCTTTTGGATCTCGACCTTGCAGATGTTAATCATAGAAACCCAGAGGTTATATCTGTTCT 1010
 Db 933 TCTCCTCGAATCGGGGTTTGGGATGTCACCGGAGAAACCCGAGAGGGTACACGGTAAT 992
 QY 1011 TCACATTGCTCGGAGGCGAAGAGAGCCCTAAATCATTTGTCTCCCTTTTAAACAGGGGCG 1070
 Db 993 TCAGCTCGCTCGATGAGGAAAGAGCCGACACTGATAGCATTTGTTGTCGAAGAGGCG 1052
 QY 1071 TCGACCAGCAGATGTTATCATTTCCGATGGGAGAAAGCGGTTCAATCTCAAAAGACTAAC 1130
 Db 1053 TAATGCATTAGMAATGCTTTTGGACGGGAGAACTGCTCTGTTGATCGGAAACAAAGTCA 1112
 QY 1131 AAAACAAGGGATTTACTTTGGGTTTACCGAGAGGAAACCTTCTCCAAAGATAGTGT 1190
 Db 1113 TA---AGCGCGCGAGTGTGTTATTTGGAGAAAGGGAAGTTAGCTGCCAAAGCGGAGT 1169
 QY 1191 ATGTATTGAAATCTCGAGCAAGCTGAAAGAA---GGGACCCCAACACTCGGAGAGCATC 1247
 Db 1170 ATGTGTAGATACTCAAGCAACCCAGACACACAGAGAACCAATTTCTCTGAAGATGTTT 1229
 QY 1248 AGTTTCTCTTGAATGGCAGGTGAGTCTACGAGGAGGTTGCTGTATCTTTGAAACCG 1307
 Db 1230 TCCCTCCCTTGCAGTGGCTGCTGATCAATTCAGATAAGGTTGATGATCTTTGAAACAG 1289
 QY 1308 AGTTGCTTTGGCAAGGATTTATTTCCGATGGGCGCAAGTAGCAATGGATATTGCTCA 1367
 Db 1290 AGTTCAATGGCTCGATGCTCTATCCAAATGGAAGCACAAGTTGCAATGGATTTGCGCCG 1349
 QY 1368 AGTGGATGGAATTTTGGAAATTAACCTGGGTTTCTGGTGCAAATCCACCTCCTGAAAGACA 1427
 Db 1350 AATGAAGGAACACGCGAGTTTGTGCTG----- 1377
 QY 1428 ACGGACAACTGTTGATCTAAATGAAGTCTTTTCAATATGAAGAGAACACTTAGCTCG 1487
 Db 1378 -ACGACGAACTGACCTTACACATGGAACCTTTTCAAGTTCTGTAGAAATGCAATCAGAGTAG 1436
 QY 1488 GATGACACACTCTCCAAACAGATGGAGCTCGGAAACGCTTTTCCCGCGATGTTCCGAA 1547
 Db 1437 ACTTACAGCGTTTCTAAACTGTGGAATTCGGAAGAGCTTTCTCCACGCTGTTCGAA 1496
 QY 1548 CGTCTCGACAAGATCATGATGATGA-----AATGATCCGTTTCCCTCGGAGAGAGA 1601
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 QY 1602 CACGTCCCG-----GAGAGAGGAAGAGGTTTTCATGCTGCAAGGATGTTTCTCA 1652
 Db 1557 CACTCTGAGCAACGACAAACAAAGAGGAGGTTTCAATGGAATACAGGAGATTGTTCA 1616
 QY 1653 GAAGCAATTCACGAGGACAAAGAGGAGAAATGACAGGTCGGGGCTCTCGTCTGCTCGTC 1712
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RESULT 15

US-09-519-232-19

; Sequence 19, Application US/09519232

; Patent No. 6528702

; GENERAL INFORMATION:

; APPLICANT: Salmemon, John

; APPLICANT: Weislo, Laura

; APPLICANT: Willits, Michael

; APPLICANT: Mengiste, Tesfaye

! TITLE OF INVENTION: NOVEL PLANT GENES AND USES THEREOF
! FILE REFERENCE: S-30857A/RTP2095
! CURRENT APPLICATION NUMBER: US/09/519,232
! CURRENT FILING DATE: 2000-03-06
! NUMBER OF SEQ ID NOS: 74
! SOFTWARE: PatentIn Ver. 2.1
! SEQ ID NO 19

! LENGTH: 1803
! TYPE: DNA
! ORGANISM: Arabidopsis thaliana
! FEATURE:
! NAME/KEY: CDS
! LOCATION: (1)..(1803)
! OTHER INFORMATION: AtNMLc4-2 genomic sequence
US-09-519-232-19

Query Match 18.6%; Score 380.4; DB 4; Length 1803;
Best Local Similarity 57.4%; Pred. No. 6.1e-73;
Matches 778; Conservative 0; Mismatches 551; Indels 27; Gaps 4;

QY 351 CGCGAGAGGTGGAGTGGGTACGAGCGCTGCGGTGGGTGCTCGACTACCTCTACAG 410
DB |||||
DB 348 CGCCAGAGATTACGAAGTGGCTTTGACTCGGTGTGGCGTTTGGCGTATGTTTACAG 407
QY 411 CGGCCCTCGCGACCTGCCAAGCGCGCTCTCGTCTGCGTACGAGGACTGCGCCA 470
DB |||||
DB 408 CGCGAGAGTGGTCCCGCGGAGGAGCTTCTGCTTGGGTAGACGAGATTGTTGCCA 467
QY 471 CGTGGGTGCGACCCCGCGCTCATGGCGAGGTCTCTTCGCGCTCCACCTT 530
DB |||||
DB 468 CGTGGCTTGGCGGTCAAGGTGGATTCTATGGTGGAGGTCTTATCTGTCTTTCGTTT 527
QY 531 CCAGTCCCGAGCTCAACAACCTCTCCAGCGGCTCTCTTGTATGCTCTTGAAGGT 590
DB |||||
DB 528 CCAGATTCAAGAAATTAGTTACTCTGTATGAGAGGAGTCTTGGAAATTGTAGACAAAGT 587
QY 591 TGAAGTAGATTAACCTTCTATTGATCTTATGTTGCCAATCTATCCACAATCTTGGAT 650
DB |||||
DB 588 TGTAGTGAAGACATCTTGGTTATATCAAGCTTGATATCTATGTGTGTAACAATACAA 647
QY 651 GAACTGCTTGAAGATGCTTATGATGTAGTTCGGTCAAACTTGCATGATGATTTACTCT 710
DB |||||
DB 648 GAAGCTTTTGTATAGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 707
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DB |||||
DB 708 TGAGAAGTCTTTACCTCAACACATTTCAAGCAATCATAGACATCCCGGAGCGCTCTG 767
QY 771 ATTAATTTTACCAGAAACAAGGATTTCTTAACAAACATGTGAGGAGGATACACAGGC 830
DB |||||
DB 768 TCTAGAGCCCTAAA-----CTAGAAAGGCATGTCAAGAACATATACAGGC 815
QY 831 CTTGACTCTGACGATGTAGAGTGTAGTGTAGTGTAGTGTAGTGTAGTGTAGTGTAGTGT 890
DB |||||
DB 816 CTTGACTCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 875
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DB 876 CGATGAGCGTATGCTCTTCAATTTTGTCTATCGCTCACTCGCGTGTGAGACCGCGTATGA 935
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DB 936 TCTCTCGAGCTTGAGCTTGGGATGTTAAACCTTAGAAATCCGAGGGGATACACTGTGCT 995
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DB 1176 ATGCATAGAGGTACTTGAGCATGAACAAAACATAGAAATATTTGTCGCTATAGAGGCTTC 1235
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DB |||||
DB 1236 ACTTTCTCTCCAGTAACTCCAGAGGAGTTGAGGATGAGGTTGCTCTATTATGAAACCG 1295
QY 1308 AGTTGCTTTGGCAAGGATTATGTTTCCGATGGAGGCAAGAGTAGCAATGGATATTGCTCA 1367
DB |||||
DB 1296 AGTTGCACTTCTCGACTTCTTTCAGTGGAACTGAAACTGTACAGGGTATTGCCAA 1355
QY 1368 AGTGATGGAACTTTGGAATTTA---ACCTGGGTTCTGGTGCATAATCCACCTCTCTGAAAG 1424
DB |||||
DB 1356 ATTGGAGGAACATGCGAGTTTACAGCTTCTAGTCTCGAGCTGATCATCATTTGGTGA 1415
QY 1425 ACAACGGACAACTGTTGATCTAAATGAAGTCTTTTCAATATGAAGAAGAACACTTACG 1484
DB |||||
DB 1416 AAAGCGGACATCACTAGACCTAAATATGGCGCGTTCCAAATCCATGAGAAGCATTTGAG 1475
QY 1485 TCGGATGACAGCACTCTCCAAAACAGTGGAGCTCGGNAACGCTTTTCCCGCGATGTTTC 1544
DB |||||
DB 1476 TAGACTAAGAGCACTTTGTAAACCGTGGAACTCGGGAACGCTACTTCAACCGATGTTTC 1535
QY 1545 GAACTGCTCGAAGATCATGGATGATGAACCTGATCCGGTTCCTCTCGGAAGAGACAC 1604
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DB 1536 GCTTGTATCACTTTATGATCTAGGACTTGAATCATCTTCTAGCTAGTAGAAGATAC 1595
QY 1605 GTCCGCG-----GAGAAAGAGAGAGTTCATGACCTGCAAGGATGTTCTTTCAGAA 1655
DB |||||
QY 1656 GGCATTCCACGAGCAAGGAGGAGGAGTGCAGGTC 1691
DB |||||
DB 1656 GACCTTTAGTGAGCAAGGAGGAGGAGTGTGGAAGTTC 1691

Search completed: December 7, 2003, 00:31:00
Job time : 131 secs

